Addendum 1

to FDR Group Chairman Factual Report - 10

DCA96MA070

submitted September 9, 1998

NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering Washington, D.C. 20594

January 31, 1997

Flight Data Recorder - 10

Addendum to Group Chairman's Factual Report

(Additional Parameters for Flt. 800 and Prior Landing)

by Dennis R. Grossi

A. ACCIDENT

Location: East Moriches, N.Y.

Date: July 17, 1996

Time: 2031 local standard time

Aircraft: Trans World Airlines (TWA) Flt. 800, B-747-131, N93119

NTSB Number: DCA96MA070

B. SUMMARY

On July 17, 1996, about 2031 eastern daylight time, a Boeing 747-131, N93119, operated as Trans World Airlines Flight 800 (TWA800), crashed into the Atlantic Ocean, about 8 miles south of East Moriches, New York, after taking off from John F. Kennedy International Airport (JFK), Jamaica, New York, All 230 people aboard the airplane were killed. The airplane, which was operated under Title 14 Code of Federal Regulations (CFR) Part 121, was bound for Charles De Gaulle International Airport (CDG), Paris France. The flight data recorder (FDR) and cockpit voice recorder (CVR) ended simultaneously, about 13 minutes after takeoff.

The FDR, a Sundstrand Model UFDR (s/n 6707), was recovered from the Atlantic Ocean on July 24, 1996, and transported to the Safety Board's FDR Laboratory in the custody of the Federal Bureau of Investigation (FBI). The FDR arrived at the Safety Board's Laboratory at approximately 3:00 AM, on July 25, 1996. The damaged recorder was disassembled and the magnetic tape recording medium removed for playback. The initial readout of the recorded data was performed on July 25, 1996.

The DFDR Factual Report did not contain all of the data recorded during flight 800, nor any data for the prior landing. The attached tabular listings contain the parameters recorded during flight 800 and not listed in the DFDR Factual Report, and the DFDR data recorded during the landing at JFK. DFDR elapse time was used as the time base for data recorded during the landing prior to flight 800.

Dennis R. Grossi

National Resource Specialist Flight Data Recorders

TWA Flt. 800

B747-131, Takeoff to End of Data Tabular Data No. 2, Date Printed: January 10, 1997

National Transportation Safety Board

TWA Fit. 800, B747-131, Takeoff to End of Data Tabular Data No. 2, Date Printed: January 10, 1997, National Transportation Safety Board

LOCAL TIME (ref.)	ALTC	Elevator Position Left	(lower)	Aileron Position R inbd	Flap pos Trailing Inbd	Flap pos Trailing OUTBO	Leading Edge Lt. Set 1	Leading Edge Lt. Set 2	Leading Edge Lt. Set 3	Leading Edge Lt. Set 4	Leading Edge Rt. Set 1	Leading Edge Rt. Set 2	Leading Edge Rt. Set 3	Leading Edge Rt. Set 4	Eng 1	Eng 2	Reverser Eng 3	Eng 4
CVR	!		(degrees)	(degrees)	(degrees)	(degrees)	(discrete)	(discrete)	(discrete)	l	(discrete)	(discrete)	(discrete)		(1·T/R)	(1-T/R)	(1-T/R)	(1-T/R)
20:18:40 20:18:41	-2835 -2835	0.7 0.8	2.9	-3.4	10.8 10.9	10.1 10.0 10.0	Ext Ext	WOTZ	STOW STOW	STOW	STON							
20.10.41	-2835	0.6	2.8 2.9	.9.3 -9.1	10.7 10.9 10.8	, 99	Ext	Ext	Ēxt	Ext	Ēxt	Ext	Ext	Ēxt	STOM	STOW	STOW	STOW STOW
20:18:42	-2835	0.8	2.9	11.6	10.9 10.8 10.8	10.0 10.0 10.0	Ext	STOW	STOW	MOTS	STOW							
20:18:43	-2835 -2835	0.7 0.8	2.3 1.8	11.6 10.7	10.8 10.8 10.8	10.1 10.0 10.1	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
20:18:44	-2835	0.7	0.9	11.0	10.8 10.8 10.8 10.9	9.9 9.9 10.0	Ext	Ext	Ext	Ext	Ext Ext	Ext Ext	Ext Ext	Ext	STOM STOW	STOW STOW	STOW STOW	STOW STOW
20:18:45	-2835 -2835	0.8 0.7	·0.3	12.6 3.9	10.7 10.9	10.0 10.0	Ext	Ext	Ext	Ext	Ext		Ext	Ext Ext	STOW	STOW	STOW	STOW
20:18:46	-2835	0.7	-1.1	.9.7	10.8 10.9 10.7	10.0	Ext	STOW	STOW	STOW	STOW							
20:18:47	·2835 ·2835	0.7	·0.9 ·1.0	13.4	10.8 10.7	10.0	Ext Ext	STOW STOW STOW	STOW STOW STOW	WOTS WOTS WOTS	STOW STOW STOW							
					10.8 10.9	10.1												
20:18:48	-2835 -2835	0.9			10.8	10.0	Ext Ext Ext	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW							
20.20.15	-2835	0.8	-1.0 -1.1	10.3 11.0	10.8 10.8 10.8 10.9	10.0												
20:18:50		1	·1.0	1	10.8 10.9	10.0 10.0	Ext Ext	Ext Ext	Ext	Ext	Ext		Ext	Ext	STOW		STOW	STOW
20:18:51	·2835 ·2835	0.7 0.7	·1.0 ·1.0		10.8 10.7 10.7	10.0		Ext	STOW	STOW	STOW	STOW						
20:18:52	-2835	0.7	1.0	.2.4	10.8	10.0	Ext	Ext Ext	STOW STOW	STOW STOW	STOW STOW	STOW						
20:18:53	· 2835 · 2835	0.7 0.7	.0.9 .0.4		10.7 10.9	9.9 10.0	Ext	Ext		Ext	Ext	Ext	Ext	Ēxt	STOW	STOW	STOW	STOW
20:18:54	- 2835	0.7	0.8	-2.6	10.7 10.8 10.7	10.0	ļ	Ext		Ext		Ext		Ext	STOW	STOW	STOW	STOW
20:18:55	· 2835 · 2835	0.6	2.5	·2.6	10.9 10.7 10.9	10.0	I Fxt	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext	Ext Ext	STOW STOW STOW	STOW STOW STOW	STOW	STOW STOW STOW
20:18:56			4.2	-2.0	10.8 - 10.9	10.0	l	Ext	Ext	Ext	Ext	Fut	Ext	Evt	STAU	STOU	STOL	CTAU
20:18:57	-2835	0.7	5.1	1	10.8	9.9	Ext Ext	Ext	. Ext	Ext	Ext	Ext Ext Ext		Ext Ext Ext	STOW STOW STOW	STON STON STON	STON STON STON	STOW STOW STOW
	-2835				10.8	10.0 10.1 9.9 10.0	1											ļ
20:18:58					10.8	3 10.0	Ext	Ext	Ext	: Ext	Ext	: Ext	: Ext	: Ext	STOW	STON	STOW	STOW
20:18:59	-2835	3.2 3.6	3.8	3	10.6 10.6 10.6	} 9.9									310	310	310	310
20:19:00	-2835	8.6	4.1	·2.6	. 10 8	81 10 0	i Ext	Ext Ext	Ext Ext	Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STON STON STON	STON	STON STON STON	STOW STOW STOW
20:19:01	· 2835 · 2835	7.5	4.1	L -3.0	10.8	3] 9.5	1	Ext					Ext	Ext	STON	STO	STO	STOW
20:19:02	- 2835	7.5	3.8	3 -2.6	10.7 10.9 10.9	10.0	Ext	<u>E</u> xt	Ext	£x1	Ext	Ext	Ext	: <u>E</u> xt	STON	STO	STON	STOW
20:19:03	ļ	8.6	2.3	3 -2.6 -2.6 3 -2.6	10.5 10.6	10.0 3 10.0 3 10.0	Ext	Ext Ext			Ext Ext	Ext	Ext Ext	Ext Ext	STON STON	STON	STON STON	STOW STOW STOW
20:19:04	-283	8.9	-1.3	3 .2.6	10.6 10.5 10.1	9	Ext Ext	Ext	Ext Ext	Ext	Ext Ext	Ext	Ext	Ext Ext	STON	STON	STON	WOTZ WOTZ
				1		10.0	S)		1						1	İ		İ
20:19:09	- 283 - 283	7.9	9 -8.6 7 -10.	B -2.4	10.1 10.1	81		Ext	1					Ext			1	
20:19:00	6 -283	5 7.1	9 -3.	6 .2.	4 10.	10.0	Ext	Ext	Ext	t Ext	Ext	ti Ex	t Ext	Ext	STON	/ STOV	STO	STOW

TWA Flt. 800, B747-131, Takeoff to End of Data Tabular Data No. 2, Date Printed: January 10, 1997, National Transportation Safety Board

LOCAL TIME (ref.) CVR		Elevator Position Left (degrees)		Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBO (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)	Reverser Eng 1 (1-T/R)	Reverser Eng 2 (1-T/R)	Reverser Eng 3 (1-T/R)	Reverser Eng 4 (1-T/R)
				-2.6	31.7 10.9	10.0	Ext	STOW	STOW	STOW	STOW							
20:19:07	-2835	7.9	-4.9	-2.6	10.8	10.0	Ext	STOW	STOW	STOW	STOW							
20:19:08	-2700 -2835	7.7 8.6	-7.2 -4.0	-2.2 -2.6	10.9 10.8 10.9 10.7		Ext Ext	STON STOW	STOW STOW	STON STOW	STOW STOW							
20:19:09	-2700 -2700	8.6	-2.0 -6.5 -5.9	-2.6	10.9 10.8 10.9	10.0 9.9 10.0	l Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
20:19:10	-135	7.8 8.3	-5.9	-3.0 -6.9	10.8 10.9 10.8	9.9 10.0 9.9	Ext Ext	STOW STOW	STOW STOW	STOW STOW	STOW STOW							
20:19:11	-2835	8.1	-5.1	-9.7	10.9	9.9	l Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
20:19:12	-2835 -2835	8.5 9.5	-3.4 -0.5	.9.7 13.0	10.9 10.8 10.9 10.8	10.0		Ext Ext	STOW STOW	STOW STOW	STOW STOW	STOW STOW						
20:19:13	-2835 -2835	8.8	-1.9 -5.6 -8.7	-9.7	10.9 10.7 10.9	10.0 10.0 10.0	Ext	STOW	STOW	STOW	STOW							
20:19:14	-2700	8.2 7.2	.8.7	·3.7	10.8 10.9	9.9	Ext Ext	WOTZ	VOTS VOTS		STOW							
20:19:15	-2700	7.1	.7.7	-6.9	10.8 10.9 10.7	10.0	1	Ext	STOW	STOW	STOW	STOW						
20:19:16	·2700 ·2700	7.6 8.5	-5.3 -0.7	-8.3 -8.5	10.9 10.8	10.0 10.0 10.0	Ext Ext	STON STON	STOW STOW	STOW STOW	STOW STOW							
20:19:17	-2700	7.5	-2.5 -2.3 -1.3	-7.9	10.9 10.7 10.8	9.9	Ext	STOW	STOW	STOW	STOW							
20:19:18	·2565 ·2700	7.7 7.5	1.3	.7.9 -8.1	10.8 10.9 10.7	9.8 9.9	Ext Ext	Ext Ext		Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext		STOW STOW	STOW STOW	STOW STOW
20:19:19	-2700	7.9	·1.7	-10.1	10.8 10.8 10.9			Ext	STOW	STOW	STOW	STOW						
20:19:20	-2700 -2700	7.8 7.5	·1.8 ·3.8	-16.4 -13.0	10.8 10.9 10.7	9.8 10.0 9.9	Ext Ext	STOW STOW	STOW STOW	STOW STOW	STOW STOW							
20:19:21	-2700	7.0	-4.1	-12.0	10.9 10.8 10.8	9.9	Ext	STOW	STOW	STOW	STOW							
20:19:22	-2700 -2565	7.2	·1.3		10.7	9.9	Ext	Ext Ext					Ext Ext	Ext Ext		STOW		STOW
20:19:23	-2700	6.7	·3.1	-14.4	10.7 10.8 10.7	9.9	Ext	STOW	STOW	STOW	STOW							
20:19:24	-2700 -2700	6.1 5.8	·4.5 ·0.7	·11.2 ·17.0	10.6 10.7 10.8 10.7	11 9.8	3l Ext	Ext Ext	STOW STOW	STOW STOW	STOW STOW	STOW STOW						
20:19:25	-2700	5.0	-2.9	-17.0	10.8 10.7	9.8	B Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STON	STON	STON	STOW
20:19:26	·2700 ·2700	5.0 4.8	-1.2 -1.2	·18.0 -18.3	10.7	9.9	Ext Ext	Ext Ext				Ext	Ext	Ext	STOW	STOW	STOW	WOTZ
20:19:27	-2430	4.4	-3.4	·18.3	10.6 10.7	' 9.7	7 Trans	Trans	n/a	Trans	Ext	Ext	Ext	Ext	STON	STON	STON	WOTZ WOTZ WOTZ
20:19:28	-2700 -2700	4.5 4.6	-1.5 -1.3	-21.1 -9.7	10.7 10.8 10.7	9.7 9.9 9.8	9	Ext	Ext	Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STON	STON	STON	STOW
20:19:29	-2700	3.7	ľ		10.8	9.7	7 Ext	l Ext	Ext	: Ext	: Ext	:l Ext	Ext	. Ext	: STON	STON	STON	STOW STOW STOW
20:19:30	·2700	3.2 2.4			10.8	9.6	3	Ext	STON	STON	STON STON	STOW						
20:19:31	-2700	3.1	-1.2		10.8	9.8	Ext	. Ext	: Ext	Ext Ext	Ext Ext	:l Ext	Ext	: Ext	: STON	II STON	ri stow	STOW STOW STOW
20:19:32	2700 2835	2.6	·1.2 ·2.6	·22.1 ·10.3	10.1 10.1 10.1	3 9.8	B	Ext	STON	STON	STON	STOW						

TWA Flt. 800, B747-131, Takeoff to End of Data Tabular Data No. 2, Date Printed: January 10, 1997, National Transportation Safety Board

LOCAL TIME (ref.) CVR	ALTC (FEET)	Elevator Position Left (degrees)	Position (lower)	Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBD (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)	Eng 1	Reverser Eng 2 (1-T/R)	Reverser Eng 3 (1-T/R)	Reverser Eng 4 (1-T/R)
20:19:33	-2700	2.3	-3.0	-23.1	10.8 10.7	9.7 9.8	Ext	STON	STOW	STOW	STOW							
20:19:34	-2700 -2835	1.9 -0.2	·2.7 ·1.5	·23.5 ·8.7	10.8 10.7 10.7 10.7	9.8 9.8 9.8 9.8	Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	STOW	STOW STOW	STOW STOW STOW	STOW STOW STOW
20:19:35	-2835	-2.1	-1.5	·21.5	10.7 10.7	9.7 9.7	Ext	Ext Ext	Ext Ext	Ext Ext	Ext	Ext	Ext		STON	STON	STON	STOW STOW STOW
20:19:36	· 2835 · 2835	-3.3 -4.0	-3.1 -2.9	·10.3 ·16.0	10.7 10.7 10.8 10.7 10.7	9.8 9.7 9.8 9.7 9.8		Ext	Ēxt	Ext	Ext Ext	Ext Ext	Ext Ext	Ext	STOW	STOW STOW	STOW STOW	STOW
20:19:37	-2970	-4.0	.2.7	-14.8	10.7 10.8 10.7	9.8	Ext Ext	STOW STOW STOW	STOW STOW STOW	STON	STON STOW STOW							
20:19:38	-3105 -3105	-4.3 -4.9	·2.5	·10.3	10.8	9.8		Ext	STOW	STOW	STOW	STOW						
20:19:39	-3240	-5.3	-2.5	27.6	10.7 10.8 10.7 10.8	9.7 9.8 9.8 9.8	Fxt	Ext Ext	STOM STOW STOM	STOW STOW STOW	STOW STOW STOW	STON STON STON						
20:19:40	·3375 ·3375	·7.1 ·6.9	·2.3 ·2.0	0.0 2.2	10.7 10.7 10.7	9.7 9.8 9.7	'l Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
20:19:41	-3510	-7.1	-2.5	-20.1	10.8 10.7 10.7	9.7 9.7 9.7	Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext Ext	Ext Ext	Ext Ext	Ext Ext	STOW STOW STOW	STOW STOW	STOW STOW	STOW STOW STOW
20:19:42	-3510 -3240	-7.1 -7.4	-2.1 -1.7	3.0	10.7 10.8 10.7	9.8 9.7 9.8	Ext	STON	STOW	STOW	STOW							
20:19:43	-3105	-7.4	-2.1	27.2	10.7 10.7	9.8 9.8	Ext	Ext Ext	Ext	Ext	Ext	Ext			STOW	STOW	STOW	STOW
20:19:44	-2700 -2295	-6.9 -6.7	·2.6 ·2.5	0.0 -5.7	10.8 10.7 10.7 10.7	9.8 9.8 9.8	Ext	Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STOW STOW	STOW	STOW STOW	STOW STOW
20:19:45	-1890 -1485	-5.7 -4.1	-2.2	-3.0	10.7 10.7 10.8 10.7	9.8	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext	Ext Ext Ext	l STOW	STOM STOM STOM	STOW STOW STOW	STOW STOW STOW
20:19:46	-810	4.1	2.3		10.8 10.7	9.6		LAL	LAC	LAL	- CAL	EAL	EAL	EAL	310#	310#	310#	310#
20:19:47	0	-3.8	-1.7	-15.0 -2.6	10.8 10.7 10.7	9.8	Ext Ext		STON	STON	STOW STOW							
20:19:48	675	-2.5		0.0		9.8	Ext	STOW	STON	STOW	STOW							
20:19:49	1350 2160	-1.4 -0.9	-1.7 -1.9	-1.0 3.0	10.8 10.7 10.8 10.7 10.8	9.8	Ext Ext	STON	STON	STON STON	STOW STOW							
20:19:50	2835	.1.7 .1.9	·2.1 ·2.2	4.9	10.7	9.8	Ext	STON	STON	STOW	STOW							
20:19:51	3510 4320	11.7	-2.4		10.7 10.7	9.7	Ext Ext	STON	STON	STOW	STOW WOTZ							
20:19:52	4995	-1.1	.2.3	3.9	10.7 10.8 10.7	9.8	Ext	STOW	I STON	STON	STOW							
20:19:53	5670 6210	-1.7	·2.3 ·2.1 ·1.8	3.9	10.6	9.8	Ext	Ext Ext	STON	STON	STON	STOW STOW						
	7020				10.7 10.6	9.	3				F.u.							
20:19:54 20:19:55	7425	-1.2 -0.9	-1.9	1.0	10.6	9.	7 8 Ext	Ext Ext	Ext	Ext	l l	Ext Ext Ext		Ext	sto.		STOW	STOW
		36.9		2.6	10.7 10.7	9.1	8				<u> </u>							
20:19:56	8910		1 -1.2	1.6	10.7	9.1	BÌ		1			1			1			1
20:19:57	9180	-2.1 -2.0	-1.2	·2.4 27.2	10.7	9.1	B Ext		Ext Ext	Ext Ext	Ext Ext	Ext	Ext Ext	Ext Ext	STON	STON	MOT2	WOT2
20:19:58	9585	-1.8	1.3	4.3	10.8 10.6	9.1	B Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STON	STON	STON	STOW

TWA Fit. 800, B747-131, Takeoff to End of Data Tabular Data No. 2, Date Printed: January 10, 1997, National Transportation Safety Board

LOCAL TIME (ref.) CVR		Elevator Position Left (degrees)	Rudder Position (lower) (degrees)	R inbd	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBD (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Set 3	Leading Edge Rt. Set 4 (discrete)	Eng 1	Reverser Eng 2 (1-T/R)	Reverser Eng 3 (1·T/R)	Reverser Eng 4 (1-T/R)
20:19:59	19710	-1.0 -1.7	-1.4	-0.4	10.7	9.8	Ext	Ext	Ext Ext	Ext	Ext Ext	Ext	Ext Ext	Ext	STOW STOW	STOW STOW	STOW	STOW
	10260	-1.7		-1.0	10.7 10.6 10.7	9.8 9.7 9.8	Ext	Ext	EXT	Ext	EXT	Ext	EXT	Ext	STOW	STOW	STOW	STOW
20:20:00	10530	-2.1	-1.3 -1.3	-0.4	10.7 10.7 10.7	9.7 9.8	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	WOTZ	STOW
20:20:01	11880 11070	·2.5 ·2.2	-1.3	0.0	10.6 10.6	9.8 9.8	l Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STOW Stow	STOW STOW	STOW STOW	STON STON
20 20 22					10.6 10.7	9.7 9.8			F4	F.A	F	FA	5.4	FA	CTO.	CTO!	570.	5701
20:20:02	11340	·2.1	·1.6		10.6 10.7 10.7	9.8 9.8 9.8	Fxt	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STOW STOW	STOW STOW	MOTS WOTS	STOW
20.20.03	11745	·2.4 ·2.1	:1.7 :1.7	-3.0	10.7 10.6	9.8 9.8	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW STOW
20:20:04	12015	-2.1	-1.5	-8.3	10.6 10.6	9.8	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
20:20:05	12285 11745	·2.2 ·2.1	·1.5 ·1.3	·6.3 ·3.7	10.7 10.7 10.7	9.8 9.8 9.8	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STOW	STOW STOW	STOW	STOW STOW
	11/43	2.1	13	3.7	10.6	9.8												
20:20:06	12555	-2.1	-1.5		10.6 10.7	9.8 9.8	Ext		Ext	Ext	Ext	Ext	Ext	Ext	Į.	STOW	STOW	STOW
20:20:07	12825 12960	·2.0 ·1.9	·1.9 ·1.5	-9.3 -8.3	10.6 10.6 10.6	1 98	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STOW STOW	STOW STOW	STON	STON
20:20:08	13095	-1.8	.1.1	-10.7	10.5 10.6	9.8	Ext	Ext	Ext	Ext	Ext.	Ext	Ext	Ext	STOW	STOW	STON	STOW
20:20:09	13365	.1.6	.0.8	0.0	10.5 10.6	9.7	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
	13365	:1.7	-0.5	·2.4	10.7 10.6 10.6	9.8		Ext	Ext	Ext					ļ			
20:20:10	12825	-1.7	-0.8	-4.7	10.6 10.5	9.8	Ext	Ext	Ext	Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	. STOW	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW
20:20:11	13635 13770	-1.3 -1.7	·1.2 ·1.3	-4.7 -6.3	10.6 10.6	9.8	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STÓW	STÓW
** ** 10	10005			15.0	10.5 10.7	9.8		-	F.104	F	F.3.		F	F	FFAI	ETOU	FYAT	F781
20:20:12	13905 13905	-1.7	-1.3		10.6 10.7 10.5	9.8	i Ext	: Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	l Ext	Ext Ext Ext	: STOW	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW
20.20.13	14040	-1.3	·1.3 ·1.1	-5.7	10.7	9.8				LAU]		5.0"	
20:20:14	14175	-1.2	-1.2	-14.6	10.7	9.8 9.8	Ext		Ext	Ext	Ext	Ext	Ext	Ext	STON	STOW	STOW	STOW
20:20:15	13500 14310	·1.1 ·0.8	-1.2	-14.8	10.7 - 10.6 10.7	9.8	Ext		Ext Ext	Ext Ext		Ext Ext	Ext Ext	Ext Ext			STOW	STOW
	14310	10.8			10.6	9.8		}						}				
20:20:16		1.3	.1.1	i	10.6	il 9.8	Ext	Ext	Ext Ext	Ext Ext	Ext	Ext	l Ext	Ext	: STOW	II STO₩	il STO₩	1 STOW
20:20:17	14445 14580	-1.3 -1.0	-1.2 -1.2	·3.0 ·5.3	10.6 10.7 10.6	9.8 9.8 9.8		Ext	Ext	Ext	Ext	Ext	Ext	Ext	STON	STOW	STOW	STOW
20:20:18	14715	-0.8	-1.3	.9.3	10.5	9.8	s	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STON	STON	STON	STOW
20:20:19	14850	-0.4	-1.3	-6.3	10.6	9.8	Ext	: Ext	Ext	Ext	Ext	. Ext	Ext	Ext	: STON	STON STON STON	STON STON STON	STOW STOW STOW
	14175	0.0	-0.9	-2.0	10.6 10.6 10.6	9.8	3								}			
20:20:20	14985	0.4	-0.9	0.6		9.8	Ext	Ext	Ext Ext				Ext Ext		STON	STOW	STON	STOW STOW STOW
20:20:21	15120 15120	0.3	1.1	0.0	10.6	9.7	' Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STON	STON	STON	STOW
	l	1			10.6	9.8	<u> </u>											
20:20:22	1		1		10.7	9.7	' Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	: STON	STON	r Stow	STOW
20:20:23	15255 15525	0.6	:1.3	·2.0	10.6 10.6 10.6	5 9.8	3	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STON	STOW	STON	STOW
20:20:24	14715	0.6	.0.9	-1.4	10.7	7 9.8 5 9.8	B Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STON	STON	STON	STOW
20:20:25	1	0.7			10. 10. 10.	9.8 9.8 9.8	Ext		Ext Ext				Ext Ext	Ext Ext	STON	STON STON	STON STON	STOW STOW STOW

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LOCAL TIME (ref.) CVR		Elevator Position Left (degrees)	Rudder Position (lower) (degrees)	Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBD (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)	Eng 1	Reverser Eng 2 (1-T/R)	Reverser Eng 3 (1-T/R)	Reverser Eng 4 (1-T/R)
20:20:26	15525 15525 15930	0.5 0.6 0.4	·0.5 ·0.6 ·0.6	2.6 1.6 3.9	10.6 10.7 10.6 10.6 10.6	9.7 9.7	Ext Ext Ext	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW							
20:20:28	15660	-0.2	-0.7	·2.0	10.6 10.7 10.6 10.7	9.8 9.7 9.6	Ext Ext	Ext Ext	Ext	Ext	Ext Ext	Ext	Ext Ext	Ext	STOW	STOW STOW	STOW	STOW
20:20:29	15660 15660	-0.4 -0.1	·0.7 ·0.7	-2.0 -2.6 -2.2	10.6 10.5 10.6	9.6 9.8	Ext	Ext	Ext Ext	Ext Ext	Ext	Ext Ext Ext	Ext Ext	Ext Ext Ext	STOW STOW STOW	STOW	STOW STOW STOW	STON STON STON
20:20:30	15660	-0.2	-0.5	-6.3 -2.6	10.6 10.6 10.6	9.7 9.8	Ext Ext	STOW STOW	STOW STOW	STOW STOW	STOW STOW							
20:20:31	15660 15795	·0.2 0.2	-0.4 -0.4	-2.4	10.6 10.7	9.6 9.8 9.8 9.8	Ext	STOW	STOW	STOW	STOW							
20:20:32	15795	0.5	-0.4	·2.0 8.3	10.6 10.6 10.6 10.7	9.6 9.7 9.6	Ext Ext	WOTS WOTS	STOW STOW	STOW STOW	STOW STOW							
20:20:33	15795 15795	0.0 -0.2 -0.2	-0.4 -0.7	-1.6	10.6 10.7	9.7 9.8 9.8		Ext	STOW	STOW	STOW	STON						
20:20:34	15795	-0.2	-0.8	·2.6 ·2.0	10.6 10.7 10.6	9.7 9.7 9.6	Ext	Ext Ext	STOW STOW	STOW STOW	STOW STOW	STOW STOW						
20:20:35	15795 15795	-0.2	-0.9		10.7 10.6	9.7 9.8	Ext	STOW	STOW	STOW	STOW							
20:20:36	15930	-0.1 -0.7	-0.9 -0.9	·2.6 ·2.4	10.6	9.8 9.6 9.7 9.6	Ext Ext	STOW STOW	STOW STOW	STOW STOW	STON STON							
20:20:37	15930 15930	0.2	·0.9 ·1.2	-2.0	10.7 10.6 10.6		Ext	STOW	STOW	STOW	STOW							
20:20:38	15930	0.4	· ō. 9	-4.7	10.6 10.7 10.6	9.8 9.7 9.8	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext		Ext Ext	Ext Ext	STOW	STOW STOW	STOW WOTZ	WOT2
20:20:39	16065	0.7	.0.7	-2.0	10.6 10.6 10.7	9.8	l Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STON	STOW	STOW	STOW
20:20:40	16065 16200	0.6 1.0	-0.6 -0.7	·1.0 6.9		9.8 9.7	Ext Ext	STOW STOW	STOW STOW	STOW STOW	STON STON							
20:20:41	16200	0.7	·0.7 ·0.9		10.6 10.6 10.7		Ext	STOW	STOW	STOW	STOW							
20:20:42	16335 16335	0.7 0.7	-1.0	2.2	10.6 10.7 10.6	9.6 9.8 9.6	Ext Ext	Ext Ext		Ext Ext	Ext Ext		Ext Ext	Ext Ext	STOW STOW	STOW WOTZ	WOTZ WOTZ	STOW STOW
20:20:43	16335	0.7	-1.0 -0.8		10.7	9.8	Ext			STOW	STOW							
20:20:44	16470 16470	0.7 0.7	l -0.5	·1.0 8.7	10.6 10.7 10.6 10.6	9.6 9.8 9.8	Ext	Ext Ext	STOW	STOW STOW	STOW STOW	STOW STOW						
20:20:45	16605	0.6	-0.6	-3.0	10.6 10.7	9.7 9.7	Ext	Ext	1	l	l	Ext	Ext	1			l.	
20:20:46	16605 16605	0.7	-0.9 -0.5		10.6 10.7 10.5	9.7 9.8 9.7	Ext Ext	Ext Ext					Ext Ext				STOW	STOW
20:20:47	16605	0.2	-0.7	-2.0	10.7	9.7 9.7 9.8	Ext	STOW	STOW	STOW	STOW							
20:20:48	16605 16740	-0.1 -0.5	-0.8 -1.0	6.5	10.6 10.7 10.6	9.6 9.8 9.7	Ext Ext	STOW STOW	STOW STOW	STOW STOW	STOW STOW							
20:20:49	16740	-0.4	-1.3	8.9	10.7 10.6 10.6	9.8 9.7 9.8	Ext		1	STOW	STOW							
20:20:50	16740 16740	-0.4 -0.3	1.5	12.0 8.1	10.6 10.7 10.6	9.7	Ext Ext	STOW	STOW STOW	STON	STOW STOW							
20:20:51	16740	-0.2	1.5	5 8.1	10.6	9.6	Ext	STOM	STOM	STOW	STOW							

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LOCAL TIME (ref.) CVR		Elevator Position Left (degrees)	Rudder Position (lower) (degrees)	Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBD (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Set 4	Reverser Eng 1 (1-T/R)	Reverser Eng 2 (1-T/R)	Reverser Eng 3 (1-T/R)	Reverser Eng 4 (1-T/R)
20:20:52	16740 16740	·0.4 ·0.4	·1.7 ·1.4	4.9 14.2	10.7 10.6 10.6 10.6	9.8 9.8 9.7 9.8	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
20:20:53 20:20:54	16875 16875	-0.4 -0.3	·1.3 ·1.2	5.5 15.6	10.7 10.6 10.7 9.9	9.7 9.8 9.8 9.1	Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	STOW STOW STOW	STOW STOW STOW	STOW WOTS WOTS	STON STON STON
20:20:55 20:20:56	16875 16875 16875 16875	-0.2 -0.1 -0.4	-1.2 -1.2 -1.2 -1.1	15.0 7.5 5.9 5.9	10.1 8.8 9.1 7.7 7.9 6.7 6.9 5.8	0.4		Ext Ext Ext	Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	I STOW	STOW STOW STOW	STOW STOW STOW	STON STON STON
20:20:57	16875 16065 16875	-0.4 -0.4 0.0	-1.0 -1.0 -1.0	4.9	6.0 5.4 5.5 5.3 5.4 5.2	5.7 5.3 5.4 5.2 5.3	Ext Ext Ext	Ext Ext Ext	Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW
20:20:59 20:21:00	16875 16875 16875	-0.4 -0.4 -0.7	-1.0 -0.9 -0.6		5.4 5.2 5.3 5.2 5.3	5.3 5.1 5.2 5.1 5.2	Ext Ext Ext		Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	STOW WOTZ WOTZ	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW
20:21:01 20:21:02	16875 16875	·1.3	-0.5 -0.5	6.9	5.2 5.3 5.1 5.3 5.1	5.2 5.0	Ext Ext Ext	j Ext	Ext Ext Ext	Ext Ext Ext	Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext		STOW STOW STOW	STOW STOW STOW	STOW
20:21:03 20:21:04		-1.0 -0.9	-0.6 -0.7 -0.7 -0.7	17.4	5.3 5.1 5.3 5.1 5.2 5.1 5.3 5.3	5.2 5.0 5.2 5.0 5.2 5.0 5.2	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext	Ext	Ext Ext Ext	STOW	STOW STOW STOW	NOTS NOTS NOTS	STON STON STON
20:21:05		.0.7	-0.7 -0.7 -0.7	4.9	5.2 5.1 5.2 5.1	5.2 5.0 5.2 5.0	Ext Ext Ext	Ext	. Ext	Ext Ext Ext	Ext	Ext	Ext	Ext Ext Ext	: STOW	STOW STOW STOW	STON STON STON	STOW STOW STOW
20:21:07 20:21:08		-0.8	-0.8 -0.9 -0.9	12.6	5.2 5.1 5.2 5.1 5.2	5.2 5.0 5.2 5.0 5.2	Ext Ext Ext	Ext	Ext	Ext Ext Ext	Ext Ext Ext	Ext Ext Ext	Ext	Ext	STOW	STOW STOW STOW	STON STON STON	STOW STOW STOW
20:21:09 20:21:10	16740	-0.5	-0.9	4.3	5.1 5.2 5.1 5.2 5.1	5.0 5.2 5.2 5.0	Ext Ext Ext	: Ext	Ext	Ext Ext Ext	Ext	i Ext	. Ext	Ext Ext Ext	STOW	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW
20:21:11 20:21:12	Ì	-0.6	.0.8	4.3 .9.7	5.2 5.1 5.2 5.1 5.2 5.1	5.2 5.2 5.2 5.2	Ext Ext Ext	: Ext	: Ext	. Ext	: Ext	: Ext	:l Ext	Ext	STON STON	STON STON STON	STON STON	STON STON STON
20:21:13	16740	-0.4	-0.5	0.6	5.2	5.0 5.2 4.9	Ext								STON	STON	STON	STON STON
20:21:14	17820	.0.7	-0.4	1	4.9	4.9	Ext	l				İ						
20:21:15	16740			-2.0	4.0	4.4	2		Ext	Ext	Ext	Ext	1	Ext		}		
20:21:10	1593	0.5	-0.	7 -3.0 5 -6.1 -8.3	3.	. 4 (0	t Ext	Ext	Ext	Ext	Ext	Ext	Ext	STON	STON	STO	STOW

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LOCAL TIME (ref.) CVR		Elevator Position Left (degrees)	Rudder Position (lower)	Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBD (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Set 3	Leading Edge Rt. Set 4 (discrete)	Eng 1	Reverser Eng 2 (1·T/R)	Reverser Eng 3	Reverser Eng 4 (1-T/R)
	(1221)	(degrees)	(degi ees)	(degrees)		3.4	(discrete)	(discrete)	(discrete)	(discrete)	(4130,616)	(41361666)		(41361667	(2-17.17)	12.17.17	17.17	
20:21:18	16605	-0.4	0.5	-7.9	2.7 2.7 2.6	3.6 3.2	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
20:21:19	16605 16605	·0.3 ·0.2	0.5 0.5 0.5	.7.9 .8.3	2.6 2.5 2.5 2.5 2.4 2.4	3.3 2.9 3.0 9.9 2.9	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:21:20	16605	-0.2	0.5 0.7	-9.7	2.4	2.9 2.6 2.8	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
20:21:21	16605 16605	·0.2 ·0.2	0.7	.9.7 .9.7	2.3 2.3 2.1 2.2 2.0	2.8 2.5 2.7 2.4	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STOW STOW	STON	STOW STOW	STOW STOW
20:21:22	16605 16605	-0.3	0.6	-9.3	2.1 2.0 2.0	2.6 2.3 2.5	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	WOT2	STOW	STOW	1
20:21:23	16605	-0.4 -0.4		-8.7 -9.3	1.9 1.9 1.8	2.2 2.4 2.1	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STOW	STOW	STOW STOW	STON
20:21:24	16470	-0.5	0.2 0.1	-11.4	1.8 1.7 1.7	2.0	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STON	STOW	STOW
20:21:25	16470 16470	·0.4	0.0	·11.2	1.6 1.6	1.9 2.1	Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STON STON	STON	STOW STOW	STOW STOW
20:21:26	16335	0.4	.0.6	-9.7	1.5 1.5 1.4	1.7	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STON	STOW	STOW
20:21:27	16335 16200	0.3 0.3	-0.8 -0.8	-10.7 -12.4	1.3	1.7 1.8 1.6	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STOW STOW	STON	STOW STOW	STON STOW
20:21:28	16065	0.5	-0.8	-11.2	1.3 1.2 1.2			Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STON	STOW	STOW
20:21:29	16065 15930	0.5 0.5	·0.9 ·1.2	-9.7 -10.7	1.1 1.1 1.0	1.4 1.6 1.3	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STOW STOW	STON STON	STOW STOW	STOW STOW
20:21:30	15795	0.5	-1.9	.7.3	1.0 1.0 1.0	1.5 1.3 1.4	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STON	STOW	STOW
20:21:31	15660 15525	0.5 0.4	·1.9	1.0	0.9 0.9 0.8	1.2 1.3 1.1	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STOW	STON		STOW STOW
20:21:32	15390	0.5	-1.6	4.9	0.9	3 1.1	i Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STON	STON	STOW
20:21:33	15255 15120	0.5 0.4	·1.5	0.0	0.8 0.7 0.7	1.2 1.0 1.1	Ext Ext		Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STOW STOW	STON STON	STOW STOW	STOW STOW
20:21:34		0.5	-1.3	-9.7	0.7 0.7 0.6	1.0	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STON	STOV	STON	STOW
20:21:35	14715 14445	0.4 0.4	1.3	.7.3 -9.3	0.6 0.6 0.5	8.0 0.9	Ext Ext	Ext Ext		Ext Ext	Ext	Ext	Ext	Ext	STON	STO	r Stow	STOW
20:21:36	14175	0.5	-1.1	-5.7		0.8 0.7 0.8	Ext	Ext	Ext	Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STOW STOW	STON STON STON	STOW STOW	STOW STOW STOW
20:21:37	14040 13905	0.4 0.3	.0.7		0.4	0.6 0.7 0.6	Ext	: Ext	Ext	Ext	Ext	Ext	Ext	Ext	STON	STO	Stor	STOW
20:21:38	13635	0.0	.0.6	5.7	0.4	0.7 0.5 0.6	Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext	STON	STON	STON	STOW STOW
20:21:39	13365 13095	0.0	.0.	6.9	0.	0.5	Ext								STON	STO		STOW
20:21:40		1			0	0.5	Ext Trans	Ext	Ext	Ext	Trans	Ext	Trans	i Ext	STON	STON STON STON	STO	ri stow
20:21:41	12825 12555	-0.1	.0.! .0.	6.9 7 6.9	0.	2 0.4	Trans	Ext	Ext	Ext	Trans	Ext	Trans	Ext	STO	STO	STO	STON
20:21:42	12420	.0.:	-0.	9 -6.9	0.: 0.: 0.:	1 0.3	l I	Ext	Ext Ext	Ext	Trans	Ext	Trans	Ext Ext Ext	STON	0 TO 0 TS 0 TS 0 TS	STO STO	STON STON
20:21:43	12150		0.0.	9 ·8. 9 ·7.	7} 0.	0 0.3	Trans	Ext	Ext	Ext	t Trans		Trans	Ext	STO ₄	STO	STO	STON

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LOCAL TIME (ref.) CVR		Position Left	Rudder Position (lower) (degrees)	Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBD (degrees)	Set 1	Leading Edge Lt. Set 2 (discrete)	Set 3	Set 4	Set 1	Set 2	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)	Reverser Eng 1 (1-T/R)	Reverser Eng 2 (1-T/R)	Reverser Eng 3 (1-T/R)	Reverser Eng 4 (1-T/R)
20:21:44	11745	0.1	-0.9	.9.3	0.0	0.2	Trans	Ext	Ext	Ext	Trans	Ext	Trans	Ext	STOW	STOW	STOW	STOW
20:21:45	11475 10530	0.0 0.1	·1.0 ·1.0	-4.3	0.0 0.0 0.0 0.0	0.2 0.2 0.2 0.1	Trans Trans	Ext Ext Ext	Ext Ext	Ext Ext	Trans Trans	Ext Ext	Trans Trans	Ēxt Ext	STÓW STOW	STOW STOW	STÓW STÓW	STOW STOW STOW
20:21:46	10800	0.0	-1.1	-12.0	0.0	0.1 0.0 0.0	Trans Retrct		Ext Ext	Ext Trans	Trans Trans	Ext Trans	Trans Retrct	Ext Trans	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:21:47	10665 10260	0.1 0.5	-1.1	-11.8 -9.3	0.0	0.0 0.0 0.0	Retrct	Trans	Trans	Trans	Retrct	Trans	Retrct	Trans	STOW	STOW	STOW	STOW
20:21:48	9990	0.3	-1.1	-5.3	0.0	0.0 0.0 0.0	Retrct Retrct	Trans Trans	Trans Trans	Trans Trans	Retrct Retrct	Trans Trans	Retrct Retrct	Trans Trans	STOW STOW	STON STON STON	STON STON	STOW STOW STOW
20:21:49	9720 9450	0.4 0.4	-1.1 -1.0	-3.0 -9.3	0.0	0.0 0.0 0.0	Retrct	Trans	Trans	Trans	Retrct	Trans	Retrct	Trans	STÓW	STOW	ŠTÓW	STOW
20:21:50 20:21:51	8370 8775 8505	0.5 0.2 0.2	-1.0 -0.9 -0.9	·10.7	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct Retrct	Trans Trans Trans	Trans Trans Trans	Trans Trans Trans	Retrct Retrct Retrct	Trans Trans Trans	Retrct Retrct Retrct	Trans Trans Trans	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW	STOW - STOW STOW
20:21:52	8370	0.3	-0.9	-10.7	0.0	0.0	Retrot	Trans	Trans	Trans	Retrot	Trans	Retrot	Trans	STOW	STOW	STOW	STOW
20:21:53	7965 7830	0.3	·0.9 ·1.0	·11.4 ·10.3	0.0 0.0 0.0	0.0 0.0 0.0 0.0	Retrct Retrct		Trans Trans	Trans Retrct	Retrct Retrct	Trans Retrct	Retrct	Trans Retrct		WOTZ WOTZ	WOTZ WOTZ	STOW
20:21:54	7560	0.2	-0.9	·13.4		0.0 0.0	Retrct	Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct	Retrct Retrct	STOW			
20:21:55	6750 6885	0.0	-1.0 -0.9		0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:21:56	6615	0.0	-0.9	3.0 0.0	0.0 0.0 0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct		Retrct Retrct	STOW	STOW STOW	STOW STOW	WOT2
20:21:57	6345 5940	0.0 0.0	-0.9 -0.9	-12.4	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrict	Retrct	Retrot	Retrct	Retrct	STOW	STOW	STOW	STOW
20:21:58	5535	0.0	.0.9	-5.7 -10.7		0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:21:59		0.2	-0.9		0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrot	Retrct	Retrct	STOW	STOW	STOW	STOW
20:22:00	4455 4320	0.2 0.3	·0.8	·9.1 ·12.4	0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct				
20:22:01	3915 3375	0.4	-0.9 -0.9	-10.7		0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STON	WOTZ
20:22:02		0.2	-0.9			0.0	Retrct		Trans Trans	Retrot Retrot	Retrct Retrct	Retrot	Retrct Retrct	Retrct Retrct			STON	STOW
20:22:03	2430	0.4	-0.9	-10.7	0.0	0.0 0.0 0.0	Retrct				Retrct					Ì		
20:22:04	1755	0.4 0.2	-0.9		0.0	0.0	Retrot	Retrot Retrot			Retrct Retrct		Retrct Retrct	Retrct Retrct		STOW STOW	STON STON	
20:22:05	810 270		-0.8	8.7	0.0	0.0	Retrot	Retrot	Trans	Retrot	Retrct	Retrot	Retrct	Retrct	STON	STOW	STON	STOW
20:22:06			-0.9		0.0	0.0 0.0	Retrot Retrot				Retrct Retrct			Retrct Ext	STOW		STON STON	
20:22:07	-810	0.3				0.0	Retrot	Ext	Ext	Ext	Retrct	Retrot	Retrct	Retrot	STOW	STOW	STON	STOW
20:22:08	-1350 -1890	0.0	-0.5		0.0	0.0	Retroi										STON STON	
20:22:09	-2565	0.2	- o.:	7 5.9	9 0.0	0.0	Retro	Retro	Trans	Retro	Retrct	Retro	Retrct	Retrot	STON	STOW	STON	STOW
20:22:10	-3105	0.1	.0.		3 0.0			Retro	Trans	Retro	Retrot	Retrot	Retrot	Retrot	STON	STOW	STON	STOW

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LOCAL TIME (ref.)		Elevator Position Left	Rudder Position (lower)	Aileron Position R inbd	Flap pos Trailing Inbd	Flap pos Trailing OUTBO	Leading Edge Lt. Set 1	Leading Edge Lt. Set 2	Leading Edge Lt. Set 3	Leading Edge Lt. Set 4	Leading Edge Rt. Set 1	Leading Edge Rt. Set 2	Leading Edge Rt. Set 3	Leading Edge Rt. Set 4	Eng 1	Eng 2	Reverser Eng 3	Reverser Eng 4
ĊVR		(degrees)	(degrees)		(degrees)	(degrees)	(discrete)	1	(1·T/R)	(1·T/R)	(1-T/R)							
	-3780	0.1		-6.9	0.0 0.0		Retrct	Retrct	Trans	Retrct	Retrot	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:22:11	-4320	0.0	-0.7	6.5	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:22:12	-4725 -5400	0.1 0.0	·0.7 ·0.7	2.6 -13.4	0.0 0.0 0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	STOW STOW	STOW STOW	STOW STOW
20:22:13	-5805	0.4	-0.7	-12.0	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:22:14	-6345 -6885	0.6 0.3	-0.7 -0.7	-12.4 -14.4	0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct		STOW STOW	STOW STOW	STOW STOW
20:22:15	· 7 4 25	0.3	-0.7	-14.6	0.0 0.0	0.0	Retrot	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:22:16	· 7830 -8370	0.4 0.3	·0.8 ·0.8	-14.6 -9.1	0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct		STOW STOW	STOW STOW	STOW STOW
20:22:17	-8775	0.2	.0.8	1	0.0 0.0 0.0	0.0 0.0 0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct		l				STOW
20:22:18	-9180 -9450	0.1	-0.7 -0.7	-13.0 8.1			Retrct Retrct	Retrct Retrct	Trans Trans	Retrot Retrot	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:22:19	- 9855	0.2	-0.8		0.0 0.0 0.0	0.0 0.0 0.0	Retrct	Retrct	Trans	Retrot	Retrot	Retrot	Retrot	Retrct		STON	STOW	STOW
20:22:20	-10125 -10530	0.2 0.3	-0.8 -0.8	5.9 -16.6	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STON	STOW STOW	STOW STOW STOW
20:22:21	-10800	0.4	8.0٠	2.0	0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct		Retrct Retrct	: STOM	STON	STON	STON STON STON
20:22:22	-11070 -11340	0.2 0.0	-0.8 -0.7		0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrot	STOW	STON	STOW	STOW
20:22:23	-11475	0.0	-0.7	-13.0		0.0	Retrct		Trans	Retrot	Retrct	Retrct				STOW	STOW	STOW
20:22:24	-117 4 5 -12015	0.0 0.0	-0.8 -0.9	·20.1 ·18.9	0.0 0.0 0.0	0.0 0.0	Retrct		Trans Trans		Retrct Retrct			Retrot Retrot	STOW	STON	STON STON	STOW STOW STOW
20:22:25	- 12150	0.1	-0.9		0.0	0.0	Retrct Retrct	Retrct	Trans Trans	Retrot Retrot	Retrct	Retrct	Retrct	Retrot	:\ STO₩	STON	STON	STOW
20:22:26	-12420 -12555	0.2	-0.9			0.0		Retrot	Trans	Retrot	Retrot	Retrct	Retrct	Retrot	STOW	STON	STON	STOW
20:22:27	· 12825	0.0	.0.9	-14.4	0.0	0.0	Retrot			Retrot Retrot					STON	STON	STON	STOW STOW STOW
20:22:28	-12960 -13230		-0.9 -0.9		i) 0.0	0.0 0.0 0.0	Retrct	Retrot	Trans		Retrot	Retrot	Retrot	Retroi	STON	STOW STOW	STON	STOW
20:22:29	-13365	0.0	.0.9	-20.1	0.0	0.0	Retrot		Trans		Retrot		Retrot			STON	STON	STOW STOW STOW
20:22:30	-13500 -13770		.0.8 -0.8	·15.6	0.0 0.0 0.0	0.0	Retro									STO	STON	STOW
20:22:31	-13905	0.2	-0.8	-17.0	0.0	0.0)			Retro								STON
20:22:32	·14040 ·14175		.0.8	-16.6	0.0	0.0	Retroi					Retrot Retrot				STO	STO.	STOW STOW STOW
20:22:33	i	1	1		0.0 0.0 0.0	0.0	Retro	Retro	Trans	Retro	Retrot	Retrot	Retrct	Retro	t STON	STON	al STOM	STOW STOW STOW
20:22:34	-14445	0.3			0.0	0.0	Retro	Retro	Trans	Retro	Retrot	Retro	Retrct	Retro	t STON	STO	/ STO	STOW
20:22:35			-		0.0	0.0) Retro			Retro		Retroi	Retrct	Retro	tl STO⊌	rl STO	STON	rl STOW
20:22:30	- 14985 - 15120	0.0	-0. -0.	8 -16.6	5 0.0 0.1 0.1	0.0	Retro									STO	STO	STOW

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LOCAL TIME (ref.)	ALTC		Rudder Position (lower)	Aileron Position R inbd	Flap pos Trailing Inbd	Flap pos Trailing OUTBD	Leading Edge Lt. Set 1	Leading Edge Lt. Set 2	Leading Edge Lt. Set 3	Leading Edge Lt. Set 4	Leading Edge Rt. Set 1	Leading Edge Rt. Set 2	Leading Edge Rt. Set 3	Leading Edge Rt. Set 4		Reverser Eng 2	Reverser Eng 3	Reverser Eng 4
cvr.	(FEET)		(degrees)		(degrees)	(degrees)	(discrete)	(1-T/R)	(1-T/R)	(1-T/R)	(1-T/R)							
20:22:37	· 15255	0.0	-0.9	11.4	0.0 0.0		Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrot	Retrct	STOW	STOW	STOW	STOW
20:22:38	· 14445 · 15525	·0.2 0.0	-0.9 -0.8	75.3 11.0	0.0 0.0 0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct		Retrct Retrct		STOW STOW	STOW	STOW Stow	STOW
20:22:39	-15525	0.1	.0.9	11.6 12.6	0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	NOTS WOTE	STOW STOW	WOTZ WOTZ	WOTS
20:22:40	-15660 -15795	0.2 0.2	-0.9 -0.8		0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	WOTZ	STOW	STOW
20:22:41	- 15930	0.4	-0.9	12.0 ·8.7	0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:22:42	·16065 ·15390	0.1	.0.9 .0.9	-12.0	0.0 0.0 0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:22:43	16335	0.3 0.1	-0.8		0.0 0.0 0.0	0.0 0.0 0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	WOT2	WOTZ WOTZ	WOTS WOTS	STOW STOW
20:22:44	·16470 ·16470	0.1	-0.9 -0.8	13.0	0.0 0.0 0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOR
20:22:45	· 16605	0.2 0.2	-0.9		0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct		Retrct Retrct	Retrct Retrct	WOTZ WOTZ	WOT2	STOW STOW	STOW STOW
20:22:46	-16740 -16875	0.3	.0.9 .0.9	-15.6	0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:22:47	-16065	0.3 0.2	-8.9		0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrot Retrot	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	STOW STOW	STOW STOW	STOW STOW
20:22:48	-17010	0.2	-0.9 -0.9	01	0.0	0.0	Retrct	Retrot		Retrot	1	1	1	ļ	Į.		STOW	
20:22:49	-17010	0.3 0.1	-0.9	.9.7 .14.6		0.0	Retrct	Retrct Retrct		Retrct Retrct						STOW	STOW	STOW STOW
20:22:50	- 17010	0.0	-0.9	-10.7	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STON	STOW	STON	STOW
20:22:51	-17145 -17145	0.1 0.2	-0.9		0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct		Retrot Retrot	Retrct Retrct	Retrot Retrot		Retrct Retrct	STON STON	STOW STOW	STOW STOW	STOW
20:22:52	-16470	0.4	-0.9	-9.7	- 0.0	0.0	Retrct	Retrot	Trans	Retrot	Retrot	Retrot	Retrot	Retrot	STOW	STOW	STOW	STOW
20:22:53	-17145 -17145	0.3 0.5	-0.8	-10.3 -14.0	0.0	0.0	Retrct Retrct	Retrot Retrot		Retrct Retrct	Retrot Retrot			Retrct Retrct	STON	STOW STOW	STON STON	STOW STOW
20:22:54	-17145	l	-0.8	1	0.0	0.0	Retrct	Retrct		Retrct				<u>i</u>	1	1	STON	
20:22:55	-17010 -17010		-0.E	-18.5 11.6	0.0	0.0	Retrct	Retrct Retrct		Retrot Retrot		Retrot Retrot			STON	STON	STON	STOW
20:22:56	-16875	0.3	-0.8	10.7	0.0	0.0) Retrct	Retrot	Trans	Retrot	Retrct	Retrot	Retrot	Retrct	STON	STON	STON	STON
20:22:57	-16065 -16740	0.5 0.3	-0.8 -0.8		. 0.0	0.0	Retrct	Retrot Retrot	Trans Trans	Retro	Retrot	Retrot Retrot			STON STON	STON STON	STON STON	STOW STOW
20:22:58	16605	0.2	.0.0	·14.0	0.0	0.0	Retrct	Retrot	Trans	Retro	Retrct	Retro	Retro	Retrct	STON	STON	STON	STOW
20:22:59	-16470 -16335		-0.1 -0.1	18.0 12.0	0.0 0.0	0.0 0.0 0.0	Retrot	Retrot Retrot		Retroi	Retrot Retrot	Retroi		Retrct Retrct		STOW STOW	STON STON	STOW STOW
20:23:00	-16065	0.2	-0.7	8 -3.4		0.0	Retrot	Retrot	Trans	Retro	Retrot	Retro	Retro	Retrot	STON	STON	STON	STOW
20:23:01	- 15930 - 15795	0.0		8 ·1.0	0.	0.0 0 0.0 0 0.0	Retrot Retrot					Retro	Retro	Retrot	STO	STON	STO	STON
20:23:02	- 15525	0.:	· 0.	9 .9.	0.	0 0.0	Retro	Retro	Trans	Retro	Retroi	Retro		Retrot		STON	STON	STON STON

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LOCAL TIME (ref.) CVR	ALTC (FEET)	Elevator Position Left (degrees)	Rudder Position (lower) (degrees)	Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	Trailing OUTBO	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)			Reverser Eng 3 (1-T/R)	Reverser Eng 4 (1-T/R)
20:23:03	-15255 -14985	0.5 0.4	-0.9 -0.9	-9.3 6.5	0.0	0.0	Retrot	Retrct	Trans	Retrot	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:23:04	-14715	0.3	-0.9	-11.4	0.0 0.0 0.0	0.0 0.0 0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW STOW	STOW STOW	STOW	STOW
20:23:05	-14445 -14175	0.2	-0.9	·10.3	0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	STOW	STOW STOW	STOW STOW STOW
20:23:06	-13905	0.2	-0.9	-8.7	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:23:07	-13500 -13095	0.2	-0.9 -0.9	-10.3 -8.7	0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	STOW STOW	WOTS WOTS WOTS	STOW STOW STOW
** ** **	10700		1.0		0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STAU	STAU	CTNU	CTAD
20:23:08	-12690 -12285 -11610		-1.0 -1.1 -1.1	-8.7	0.0 0.0 0.0	0.0	Retrct	Retrot Retrot	Trans Trans	Retrot Retrot	Retrot Retrot	Retrct	Retrot Retrot	Retrot Retrot	WOTZ WOTZ WOTZ	WOTZ WOTZ WOTZ	WOTZ WOTZ WOTZ	STOW STOW STOW
20:23:10			.1.0		0.0	0.0 0.0 0.0	Retrct	Retrct	Trans	Retrct	Retrot	Retrot	Retrct Retrct	Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:23:11	-10530 -9855	0.3	:1.1	·15.6 ·16.0	0.0 0.0 0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct			Retrct Retrct			STOW	
20:23:12	· 9180		-1.1	10.3	0.0 0.0 0.0	0.0 0.0 0.0	Retrct	Retrct	Trans		Retrct		Retrct	Retrot	STOW	STOW	STOW	STOW
20:23:13	·8235 ·7425	0.5 0.4	-0.9 -0.8	.9.3 -20.1	0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW STOW	STOW STOW STOW	STOW STOW	STOW STOW STOW
20:23:14	-6480	0.4	-0.7	-9.7	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans Trans		Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	STOW STOW	STOW MOTS MOTS	STOW STOW STOW
20:23:15	· 5535 · 4590		-0.7 -0.8		0.0 0.0 0.0	0.0	Retrct	Retrct Retrct	Trans	Retrot	Retrot	Retrot	Retrct	Retrot	STOW	STON	STOW	STOW
20:23:16	-3510	0.4	-0.9	-9.1	0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct		Retrct Retrct	Retrct Retrct	STOW STOW	STON STON STON	STOW STOW STOW	STOW STOW STOW
20:23:17	·2565 ·1485	0.5 0.5	.0.9 .0.9		0.0	0.0	Retrct		Trans		Retrot		Retrot	Retrot	STOW	STOW	STOW	STOW
20:23:18	-270	0.5	-0.9	-9.3 -8.7	0.0 0.0 0.0	0.0	Retrot Retrot	Retrot Retrot	Trans Trans		Retrct Retrct	Retrct	Retrct		STOW			[] STOW
20:23:19	810 1755	0.5 0.5	-0.8 -0.7	-9.3	0.0	0.0) [Retrot	Trans	Retrot	Retrct	Retrct	Retrot	Retrct	STOW	STOW	STON	STOW
20:23:20	ì		-0.7	-9.7	' 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	: Retrct	Retrct	Retrct	: STOW	STOW	STOW STOW STOW	STOW
20:23:21	3780 4590	0.4	.0.9	3.0	0.0	0.0		Retrot	Trans	Retrot	Retrct	Retrot	Retrct	Retrct	310#	STOW	310	STOW
20:23:22	5400	0.2	-0.7	2.2	1 0.0	0.0	Retrct	Retrct Retrct			Retrct Retrct							
20:23:23	6210		-0.7		0.0	0.0) Retrct	Retrot	Trans	Retrot	Retrot	Retrot	Retrot	Retrct	STON	STON	STOR	STOW
20:23:24		_		1	0. 0. 0.	0.0	Retrct				Retrot Retrot	Retroi	Retrot Retrot	Retrot Retrot		STON STON	STON STON	STON
20:23:25	823	0.2	-0.1	-18.5		0.0	Retro	Retro	Trans	Retro	Retrot	Retro	Retrot	Retrot	STOW	STO	STO	1
20:23:26	823 931	0.0		8 10.3 9.7	3 <u>0.</u> 7 0.	0 0.0	Retroi											
					0.	0 0.0	0				ŀ					1		
20:23:27 20:23:28	1026	0	-0.0	В	4 0.	0 0.1 0 0.1	0 Retroi	Retro	Trans	Retro	Retro	Retro	Retrot	Retro	STON	STO	STON	VOTS

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TIME (ref.)	ALTC	Position Left	Rudder Position (lower)	Aileron Position R inbd	Flap pos Trailing Inbd	Flap pos Trailing OUTBD	Leading Edge Lt. Set 1	Leading Edge Lt. Set 2	Set 3	Leading Edge Lt. Set 4	Leading Edge Rt. Set 1	Leading Edge Rt. Set 2	Set 3	Leading Edge Rt. Set 4	Eng 1	Eng 2	_	Eng 4
CVR	(FEET)	(degrees)	(degrees)	(degrees)	(degrees)	(degrees)	(discrete)	(discrete)	(discrete)	(arscrete)	(discrete)	(discrete)	(discrete)	(discrete)	(1-T/R)	(1·T/R)	(1·T/R)	(1·T/R)
20:23:29	11070	0.2	.0.8	-11.2	0.0			Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:23:30	11340 11070	0.0 0.2	·0.8 ·0.9	-12.0 -11.4	0.0 0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:23:31	12015	0.1	-0.9		0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOM
20:23:32	12285 12555	0.0 0.0	-0.9		0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:23:33	12825	0.1	.0.9		0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOM	STOW	STOW
20:23:34	12960	0.0	·0.9 ·0.9	-11.8	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
	13230	0.0		-11.8	0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:23:35	12690	0.0	-0.9		0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:23:36	13770 13770	0.2 -0.1	-0.8 -0.8	·13.0 ·12.4	0.0 0.0 0.0	0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:23:37	13905	0.0	-0.9	-12.4	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOM	STOW	STOW
20:23:38	14040 14040	0.0 0.0	-1.0 -1.1	-10.3 7.9	0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STON STOW	STON STON	STOW STOW	STOW STOW
20:23:39	14175	0.0	.1.2	-8.3	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STON	STOW	STOW
20:23:40	13635 14445	0.0 ·0.2	·1.1 ·1.0	5.9 9.7		0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct		Retrct Retrct			STON STON	STOW STOW	STOW STOW
20:23:41	14445	0.0	-0.9	9.7	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STON	MOTZ	STOW
20:23:42	14580	0.0				0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrot		STOW	STOW	STOW
•	14715	0.0	-0.7	12.0	0.0	0.0)	Retrct	Trans	Retrct	Retrot	Retrct	Retrct	Retrct	STOW	STON	STOW	STOW
20:23:43	14715	.0.2	-0.7	10.3	0.0	0.0	Retrct	Retrot	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:23:44	14715 14580	0.0	·0.9 ·0.9		0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct			Retrct	Retrct	Retrct	Retrct	STOW	STON	STON	STOW
20:23:45	14715	-0.1	-0.9	7.5	0.0	0.0	Retrot	Retrot	Trans	Retrot					STON	STO	STON	STON
20:23:46	14715 14715	0.0			0.0	0.0	Retrot	Retrot	Trans	Retrct	Retrct Retrct					STO	STON STON	STOW STOW STOW
20:23:47	14850	-0.2	و. ه.	.9.7		0.0	Retrot											STOW
20:23:48	14850 14850		.0.9	·16.6	0.0 0.0 0.0	0.0	Retro									STON		STOW STOW STOW
20:23:49	14715	-0.5	-0.7	-17.4	0.0	0.0	0 Retroi			Retrot			Retrot	Retro	t STO	r STO	/ STOW	/ STOW
20:23:50	14715 14715			20.0	5 0.1	0 0.0	0 Retroi	Retro						Retro	t STON	STO	₹ STO¥	/ STOW
20:23:51					0.0	0.0	0 Retro										STON	STOW STOW STOW
20:23:52	14580 14580		·0.4		0.1	0 0.0	0 Retro							Retroi		STO	STO.	ŠŤŎŴ
20:23:53		1	i i) 0.	0 0.	0 Retro	t Retro	t] Trans	Retro	: Retro	t Retroi	Retrot	Retro	t STOV	ri Stor	∤ ŠTÓV	STON STON STON
20:23:54	14580 14580		.0.			0 0.	0	t Retro	t Trans	Retro	Retro	Retro						
20:23:55	1471	5 -0.4	<u>. 0.</u>	8 -18.		o <u>j č.</u>	0 Retro	t Retro	t Trans	Retro	Retro	t Retro	Retro	Retro	t STO	∤ STO	d STO	STON

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LOCAL TIME (ref.) CVR	ALTC (FEET)	Elevator Position Left (degrees)	Rudder Position (lower) (degrees)	Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBO (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)	Reverser Eng 1 (1-T/R)	Reverser Eng 2 (1-T/R)	Eng 3	Reverser Eng 4 (1-T/R)
20:23:56	14715 14850	·0.4 0.0	-0.8 -0.7	·16.0 ·18.5	0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW	STOW STOW	STOW
20:23:57 20:23:58	14985 15120	0.2 0.2	-0.7 -0.7	·20.1	0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct Retrct	Retrct Retrct Retrct	Trans Trans Trans	Retrct Retrct Retrct	Retrct Retrct Retrct		Retrct Retrct Retrct	Retrct Retrct Retrct	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW
20:23:59 20:24:00	15255 15390 15525	0.3	-0.6 -0.7 -0.7	-10.3 -15.6	0.0 0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct Retrct	Trans Trans Trans	Retrct Retrct Retrct	Retrct Retrct Retrct	Retrct	Retrct Retrct Retrct	Retrct Retrct Retrct	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW	WOTS WOTS WOTS
20:24:01	15660 15795	0.4	-0.7	-18.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	Retrct	Retrct	Trans	Retrot	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	
20:24:02	15930 16065	0.3 0.3	.0.7 .0.7	-18.0 6.9		0.0 0.0 0.0	Retrot	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct		Retrct Retrct	Retrct Retrct	STOW	STOW STOW	STOW STOW	STOW STOW STOW
20:24:03	16200 16335 16470	-0.2	-0.7 -0.8 -0.8	-20.5 -20.1 -18.5	0.0	0.0 0.0 0.0	Retrct Retrct Retrct	Retrct Retrct Retrct	Trans Trans Trans	Retrct Retrct Retrct	Retrct Retrct Retrct	Retrct	Retrct Retrct Retrct	Retrct Retrct Retrct	STOW STOW STOW	WOTZ WOTZ WOTZ	STOW STOW STOW	STOW STOW STOW
20:24:05	16605	-0.2	-0.9	·14.8 ·20.5	0.0	0.0 0.0 0.0		Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:24:06	16740 16875 17010	0.0	·0.9 ·0.8		0.0	0.0	Retrct	Retrct Retrct	Trans	Retrct Retrct	Retrct Retrct		Retrct Retrct	Retrct Retrct	STOW	STOW STOW	wotz wotz	STOW
20:24:07				-16.0	0.0	0.0	Retrct	Retrct	Trans	Retrot	Retrot	Retrct	Retrot	Retrot	STOW	STOW	STOW	STOW STOW
20:24:09	17145 17145		-0.7 -0.7 -0.7	-13.4 -19.5	0.0	0.0 0.0 0.0 0.0	Retrot Retrot		Trans Trans	Retrct Retrct	Retrct Retrct		Retrct Retrct	Retrct Retrct	STOW STOW	STOW	STOW STOW	STOW STOW
20:24:10 20:24:11	17280	<u> </u>	-0.7 -0.7	-14.4 -14.4 -22.5	0.0	0.0 0.0	Retrct Retrct	Retrct	Trans		Retrot Retrot Retrot	Retrot	Retrot	Retrct Retrct Retrct	STOW	STOW	STOW STOW STOW	STOW STOW
20:24:12	17145	0.0	.0.7	-22.1	0.0 0.0 0.0	0.0 0.0 0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	worz	STOW
20:24:13	16335	0.2		-14.6	0.0	0.0	Retrct		Trans Trans Trans	Retrot	Retrot	Retrot	Retrct Retrct	Retrct Retrct Retrct	STOW STOW	STOW STOW		STOW STOW
20:24:15	16740		-0.7 -0.7	'	0.0	0.0 0.0 0.0 0.0	Retrct Retrct	Retrot	Trans	Retrot	Retro	Retrot	Retrct	Retrot	STOW	STOM	STOW	STOW
20:24:16 20:24:17	16335 15930 15660	0.5	-0.5	-14.6 -14.0 5.9	0.0 0.0 0.0	0.0 0.0 0.0 0.0	Retrot Retrot Retrot	Retrot	Trans	Retrot		Retrct	Retrct	Retrot Retrot Retrot	STOW	STON STON STON	STOW STOW STOW	STOW STOW STOW
20:24:18			-0.€	5	0.0 0.0 0.0	0.0	Retrct							Retrot			i	STOW
20:24:19	14040	0.5		11.6	0.0 0.0	0.0	Retrct	Retrot	Trans	Retrot	Retro	Retrct	Retrct	Retrct	STOW	STON	STOW STOW	STOW STOW
20:24:20	1	0.5	0.0	.23.5	0.0	0.0	Retro	Retrot	Trans	Retrot	Retro	Retrot	Retrct	Retrot	STON	STOW	STOM	STOW

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TIME (ref.)		Elevator Position Left	Rudder Position (lower)	Position R inbd	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBO (degrees)	Leading Edge Lt. Set 1	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)]]	Reverser Eng 2 (1-T/R)	Reverser Eng 3 (1-T/R)	Reverser Eng 4 (1-T/R)
CVR	(FEET)	(degrees)	(degrees)	(degrees)	(Gegrees)	0.0		(discrete)	(discrete)	(413616167	(discrete)	(Gisciete)	(41361616)	(4/56/66/				
20:24:22	11070	0.4	-0.7	-12.4	0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:24:23	9585 9180	0.4 0.5	-0.7 -0.7	·12.4 ·19.5	0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	WOTS WOTS	WOT2 WOT2	STOW STOW
20:24:24	8100	0.8	-0.8	-15.0	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:24:25	6885 5670	0.7 0.5	-0.7 -0.7	·15.0 7.5	0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct		WOTS WOTS	STOW STOW	STOW STOW
20:24:26	4455	0.5	.0.8	-18.5	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:24:27	3240 1890	0.4 0.2	-0.9 -0.9	·1.0 ·17.4	0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct				Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:24:28	810	0.4	-0.9	11.6	0.0	1 0.0	Retrot	Retrct	Trans	Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct		STOW STOW	STOW STOW	STOW STOW STOW
20:24:29	-540 -1620	0.4 0.5	-0.9 -0.9	0.6 2.6	0.0	0.0	l Retrct	Retrot	Trans	Retrct		Retrot	Retrot	Retrot		STOW	STOW	STOW
20:24:30	-2700	0.5	-0.8	4.3	0.0 0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct Retrct	Retrct	STOW	STOW STOW STOW	STON STON STON	WOTZ WOTZ WOTZ
20:24:31	·3780 ·4725	0.5 0.4	-0.8 -0.9	·11.6	0.0	0.0]	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	3104	310	310	210#
20:24:32	-5130	0.3	-0.9	-15.4	0.0	0.0	Retrot		Trans			Retrot Retrot	Retrot Retrot	Retrot Retrot		STON STON STON	STON STON STON	STON STON STON
20:24:33	-6345 -7020	0.4 0.4	-1.0 -1.0	-12.0 -14.0	0.0 0.0 0.0	0.0	Retrot								STON	STOW	STO	STOW
20:24:34	-7695	0.5	-1.1	-21.5		0.0	Retro						Retrot Retrot	Retrot	: STON		/ STO	/ STOW
20:24:35	-8370 -8910		-1.3	-14.0	0.0	0.0	3	Retrot	Trans	Retro	Retrot	Retrot	Retrot	Retro	STOW	STON	STO	STOW
20:24:36	- 9585	0.3	-1.0	-11.8	9.0 9.0 9.0	0.0	Retro		Trans	Retro	: Retrct	Retrct	Retrot Retrot	: Retroi	t! STOW	il STO⊮	STO STO STO	STON STON STON
20:24:37	- 9990 - 10395	0.4 0.2	.0.9 .0.9	-17.0 -14.0	0.0	0.0	Retro			Retro	Retrot	Retrot	Retrot	Retro	STO	STO	STON	STON
20:24:38		!			0.0	0.0	Retro	: Retro	Trans	Retro	Retrot	Retrot	Retrct	Retro	t∣ STO⊮	∤ STON	/ STO	/ STOW
20:24:39	-11070 -11340		-0.9 -1.0		0.0 0.0 0.0	0.0	ומ	Retro	Trans	Retro	Retro	Retro	Retro	Retro				
20:24:40	-11610	0.0	-1.0		0.0	0.0	0! Retro	t Retro	Trans	s Retro	t Retro	Retro	: Retro	Retro	t STO	STO	STO	STOW STOW STOW
20:24:41	-11880 -12015	·0.2	1:0	12.6		0.0	0	t Retro	t Trans	Retro	t Retro	Retro	Retro	Retro	STON	STO	STO	
20:24:42	-12285	-0.	-1.7	5.5	5 0.	0 0.1	0 Retro	t Retro	t Trans		t Retro	tj Retro		t Retro	t STO	d STO	H STO	H STON
20:24:43	- 12420 - 12555	·0.	1:	3.0	0. 0. 0.	0 0. 0 0. 0 0.	0 Retro							t Retro	t STO	STO	STO	STON
20:24:44	-12825	-0.:	1.	0 12.0	0. 0. 6 0.	0 0. 0 0.	0 Retro	ti Retro	ti Tran:	s Retro	ti Retro	t! Retro	t Retro	t Retrc	t STO	STO	W STO	M STON
20:24:45	-12960 -13230	0.0	1.	0 12.0	0.	0 0	0 Retro		t Trans	s Retro	t Retro	t Retro	Retro		t STO	y STO	STO	STOW
20:24:46	- 1336	5 0.	-	10.	3 0.	0. 0. 0.	0 Retro	t Retro	t Tran:	s Retro	t Retro	t] Retro	t Retro	t Retro	t STO	STO STO STO	STO	⊌I STOM
20:24:47	- 1363 - 1390		0 .0.	9 .21.	1 0. 0. 0.	0. 0.	0 Retro	t Retro	t Tran	s Retro	t Retro	t Retro	t Retro	t Retro	z ST0	STO	w što	H STON

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20:24:50 1400 0.3 0.9 131.0 0.0 0.0 8erct Refect Trans Refect Refect Refect STOW STOW 1400 0.0 0.0 0.0 8erct Refect Refect Refect Refect Refect STOW STOW 1400 0.0 0.0 0.0 Refect Refect Refect Refect Refect Refect Refect STOW STOW 1400 0.0 0.0 0.0 Refect R	TIME (ref.)	ALTC	Elevator Position Left	(lower)	R inbd	Inbd	Flap pos Trailing OUTBD	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)	Reverser Eng 1 (1-T/R)	Reverser Eng 2 (1-T/R)	Reverser Eng 3 (1-T/R)	Reverser Eng 4 (1-T/R)
14.6 6.2 0.3 0.9 13.0 0.0 0.0 0.0 Retrot Retrot Trans Retrot	CVR	(FEET)	(degrees)	(degrees)	(degrees)	(degr ee s)	(degrees)			L									
20:24:59 14319 0.3 0.6 13.0 0.0 0.0 Retrct Refrct R	20:24:48	-14040	0.3	-0.9	·14.8 ·14.0		0.0	Retrct	Retrct Retrct							STOW	STOW	STOW	STOW STOW
20:24:50 14715 0.2 -0.8 13.0 0.0 0.0 Retrct Retrct Trans Retrct Retrct Retrct Retrct Retrct STOW STOW 20:24:51 14955 0.2 -0.6 19.1 0.0 0.0 0.0 Retrct Retrct Retrct Retrct Retrct Retrct Retrct STOW STOW 20:24:52 15255 0.4 -0.7 0.4 0.0 0.0 Retrct 20:24:49	-14310 -14445	0.3 0.3	.0.9 -0.8	∙13.0	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW	
20:24:52 15955 0.4 0.7 0.4 0.0 0.0 0.0 Retrct Retrct Trans Retrct Retrct Retrct Retrct STOW	20:24:50	- 14715	0.2	-0.8		0.0	0.0	Retrct										STOW	STOW
20:24:52 15255 0.4 0.7 0.9 0.0 0.0 0.0 Retret Retret Trans Retret Retret Retret Retret Retret STOW STOW STOW 10:20:24:53 15390 0.2 0.7 11.4 0.0 0.0 0.0 Retret Retret Trans Retret Retret Retret Ext STOW STOW 10:20:24:54 13795 0.4 0.3 8.3 0.0 0.0 0.0 Retret Retret Trans Retret Retret Ext STOW STOW 10:20:24:55 15930 0.2 0.9 0.0 0.0 0.0 Retret Retret Trans Retret Retret Ext STOW STOW 10:20:24:55 15930 0.2 0.9 0.0 0.0 0.0 Retret Retret Trans Retret Retret Ext STOW STOW 10:20:24:55 15930 0.2 0.9 0.0 0.0 0.0 Retret Retret Trans Retret Retret Retret STOW STOW 10:20:24:55 15930 0.2 0.8 11.4 0.0 0.0 0.0 Retret Retret Trans Retret Retret Retret Retret STOW STOW 10:20:24:55 15930 0.2 0.8 11.4 0.0 0.0 Retret Retret Trans Retret Retret Retret Retret STOW STOW 10:20:24:55 15930 0.2 0.8 11.4 0.0 0.0 Retret Retret Trans Retret Retret Retret Retret Retret Retret STOW STOW 10:20:24:59 16000 0.2 0.8 11.4 0.0 0.0 Retret Retret Trans Retret	20:24:51		0.2	-0.8 -0.9	-19.1	0.0	0.0	Retrct				1	1	ł				STOW	STOW
20:24:56 15795 0.4 -0.9 -16.0 0.0 0.0 Retrot Retrot Trans Retrot	20:24:52	-15255	0.4	-0.7		0.0 0.0	0.0	Retrct	Retrct Retrct					Retrct Retrct		STOW	STOW	STOW	STOW
20:24:55 15795 0.4 0.5 0.6 0.0 0.0 0.0 Retrett Retrett Trans Retrett Retrett Ext Ext Ext STOW STOW STOW 20:24:55 15930 0.2 0.9 0.0 0.0 0.0 0.0 Retrett Retrett Trans Retrett Retrett Retrett STOW STOW 20:24:56 16685 0.2 0.8 11.0 0.0 0.0 0.0 Retrett Retrett Trans Retrett Retre	20:24:53					0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:24:56 :15000 0.2 -0.9 0.0 0.0 0.0 Retrett Retrett Trans Retrett Ret	20:24:54	-15660 -15795	0.4	-0.9 -0.9	-16.0	0.0	0.0	Retrct					Retrct Ext				STOW STOW	STOW STOW	STOW STOW
20:24:56 16055 0.2 -0.8 11.4 0.0 0.0 0.0 Retrict Ret	20 - 24 - 55	-15930	0.2	-0.9	0.0	6.2	1 0.0)	Retrct	Trans	Retrct	Retrot	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:24:59 16335 0.5 0.7 10.3 0.0		-16065	0.2	-0.9	11.0	0.0 0.0 0.0	0.0 0.0 0.0	Retrct									STOW STOW	STOW STOW	STOW
20:24:58 16740 0.2 .0.8 12.0 0.0 0.0 Retrct Retrct Trans Retrct Retrct Retrct Retrct Retrct STOM STOM	20:24:57			·0.7	10.3	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	1	1	1	
20:24:59 -16740	20:24:58	-16740	0.3	-0.8		0.0	0.0	Retrct		1. 0//0	1100101								STOW
20:24:59 -16740			0.2		10.0)	""									l	
20:25:00 -16875	20:24:59	-16740	0.2	-0.9 -0.8	2.2	0.0	0.0) Retrct	Retrct	Trans	Retrot	Retrct	Retrct	Retrct	Retrct		1	1	
20:25:01 .16335	20:25:00	-16875 -17010	0.0	.0.9	-21.5	0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans							STON	STON STOW	STOW
20:25:02 -17145	20:25:01	-16335	0.4	.0.9	-14.8	0.0	l 0.0	Retrot	Retrot	Trans	Retrot	Retrct	Retrct	Retrct	Retrct	STOW	STON	STOM	STOW
20:25:03 17415 0.2 0.9 15.6 0.0 0.	20:25:02		0.2	-0.8	-15.0 -20.9	0.0	0.0	Retrot	Retrot Retrot	Trans Trans	Retrot Retrot		Retrot Retrot	Retrot Retrot	Retrot Retrot		STON STON	MOTS I	STOW STOW
20:25:04 -17415	20:25:03	17415	0.2	.0.9	-15.6				Retrot	Trans	Retro	Retrot	Ext	Ext	Ext	sTO	STON	STON	STOW
20:25:05 .17550		-17415	5 0.4			0.0	0.0	0 Retroi											STOW STOW
20:25:06 -16740 0.0 -0.9 -10.7 0.0 0.0 Retrct Retrct Trans Retrct Retrct Retrct Retrct STOW STOW 20:25:07 -17685 0.2 0.9 0.6 0.0 0.0 0.0 Retrct Retrct Trans Retrct Retrct Retrct Retrct STOW STOW 20:25:08 -17685 0.0 0.9 1.2 0.0 5.9 Retrct	20.25.05	1755			.17 4	0.0	0.0	0 (Retroi	Trans	Retro	Retrot	Retrot	Retrot	Retro	STON	STON	r STON	STOW
17685 0.4 0.9 19.5 0.0 0		1	1		1	, š.š	0.0	0			1	1			ĺ	1			STOW
20:25:07 - 17685	20.23.00					0.0	0.0	0 Retro									STO	STON	
17820 .0.2 .1.0 13.0 0.0	20:25:07	- 1768	0.2	.0.9	0.6	0.0 0.0 0.0	0.0	0 Retro	1		1	1			1		1	1	1
20:25:09 -17820	20:25:08	-1768! -1782		-1.0	13.0	0.0	0.	0 Retro							Retro	STOW STOW	STON	STOV	STOW
20:25:10 -17820 0.0 -1.0 13.0 0.0 0.0 Retrot Retrot Trans Retrot Retrot Retrot Retrot Retrot STOW STOW 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	20:25:09	-1782	0 -0.2	-1.1	-19.5	6 0.0	0.	0 Retro	t Retro	t Trans	Retro	Retro	Retro	Retro	Retro	t STO	STO	STO	STOM
20.25.11 .17820 0.0 -1.0 -3.0 0.0 0.0 Retrot Retrot Trans Retrot Retrot Retrot Retrot STOW STOW	20:25:10	-1782 -1701				0.0	0 0.	0 Retro					Retro	Retro	Retro	t STO	STO	STO	STOW
	20:25:11	-1782	، ه	-1.0	3.0	0.0	0.	0	t Retro	t Tran:	s Retro							STO	
20:25:12 -17820		-1782	0 -0.:	1 .0.	9 12.0	0. 0. 6. 0.	0 0. 0 0. 0 0.	0 Retro		1		Retro	t Retro	Retro	Retro	t STO	STO	STO	STOW STOW
20:25:13 -17820		1	-		ì	6 0. 0.	0 0 0 0	0 Retro	t Retro	t Tran	s Retro	t Retro	t Retro	Retro	t Retro	ti STO	STO	STON STON STON	# STOW

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LOCAL TIME (ref.) CVR		Elevator Position Left (degrees)	Rudder Position (lower) (degrees)	Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	LOXITED :	Set 1	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)	Eng 1	Eng 2		Reverser Eng 4 (1-T/R)
	-17820	0.2	-0.9	-26.6	0.0	0.0												
20:25:15	-17010	0.3	-0.9	-17.4	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STON STON	STOW	STOW
20:25:16	-17820 -17820	0.2 0.3	-0.9 -0.9	·15.0 ·17.0	0.0 0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STON STOW	STOW	STOW STOW	STOW STOW STOW
20:25:17	-17820	0.4	-0.9	-18.9	0.0 0.0	0.0	Retrct	Retrot	Trans	Retrct	Retrot	Retrct	Retrct	Retrct	STOW	STOW STOW	STOW STOW	STON STON STON
20:25:18	-17820 -17820	0.4 0.3	-0.9 -0.9	-15.6 -18.5	0.0 0.0 0.0 0.0	0.0 0.0 0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	WOT2	STOW	STOW	STOW
20:25:19	-17820	0.4	-0.9	-18.9	0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct		STOW	STOW	STOW
20:25:20	-16875 -17685	0.5 0.2	-0.9 -0.9	-17.4 1.6	0.0	0.0 0.0 0.0		Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct		STOW STOW	STON STON	STOW STOW
20:25:21	-17685 -17685	0.3	·0.8		0.0 0.0 0.0 0.0	0.0 0.0	Retrct Retrct	Retrct Retrct Retrct	Trans Trans Trans	Retrct Retrct Retrct	Retrct Retrct Retrct	Retrct Retrct Retrct	Retrct Retrct Retrct	Retrct Retrct Retrct	STOW	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW
	-17550	0.4	-0.9	5.5	0.0	5.9												
20:25:23	- 17550	0.2	37.8	7.5	0.0 0.0 0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STON	STOM	STOW	STOW STOW STOW
20:25:24	· 17415 · 17415	0.3 0.5	-0.9 -0.9	6.5 0.4	0.0 0.0 0.0	0.0 0.0 0.0	Retrct	Retrot	Trans	Retrct	Retrct	Retrct	Retrct	Retrot		STOW	STOW	STOW
20:25:25	·17280	0.3	-0.9	123.3	0.0 0.0 0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrot Retrot	Retrct Retrct		STOW STOW	STOW	STOW STOW
20:25:26	-17280 -17145	0.4 0.0	.0.9 .0.9	-18.5	0.0 0.0 0.0	0.0 0.0 0.0	Retrct	Retrot	Trans		Retrot	Retrot		Retrot		ŠŤOW	ŠŤÓW	ŠTOW
20:25:27	-17145	0.0	-0.9	.2.6	0.0	0.0	Retrct	Retrot Retrot	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct		Retrot Retrot	STOW	STON	STOW	STOW
20:25:28	-17010 -16875	0.0	-0.9 -0.9	10.3 -20.5	0.0	0.0 0.0 0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct		Retrot	STOW STOW	STOM STOM	STOW STOW	STOW
20:25:29	- 16875	0.0	.0.9	·18.9 ·18.0	0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrot Retrot	: STOW	STON STON	STOW	STOW
20:25:30	-16740 -16605	0.2	-0.9	19.1		0.0		Retrot	Trans	Retrot	Retrct	Retrct	Retrct	Retrot	STOW	STOW	STOW	STOW
20:25:31	-16470	0.3	-0.9	·16.6 -19.5	0.0	0.0	Retrct	Retrot Retrot			Retrct Retrct					STON STON	STON	STOW STOW
20:25:32							Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrot	STON	STON	STON	STOW
20:25:33	13770 -15795	i			0.0 0.0 0.0 0.0	0.0	Retrot	Retrot Retrot	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct			STON STON		STOW STOW
20:25:34	- 15660 - 15525	0.2	·0.7	18.3	İ	0.0	Retrct	Retrot	Trans	Retrot	Retrct	Retrct	Retrct	Retro			STON	1
20:25:35					0.0 0.0	0.0	Retrot				Retrct Retrct					STON STON	STON	STOW
20:25:36	-14985	0.4	· 0.9	-19.5	0.0 0.0 0.0	o.0) Retrot	Retro	Trans	Retrot	Retrct	Retrct	Retrct	Retro	STON	STON	STON	STOW
20:25:37	-14715 -14445		-0.9	11.0	0.0	0.0	Retro	Retroi			Retrot Retrot	Retrct Retrct	Retrct Retrct		STON	STON STON	STON STON	STOW STOW
20:25:38	- 1417	5 0.4	.0.		0.0 0.1 6	0.0	 Retro	Retro	Trans	Retro	Retrot	Retrot	Retrct	Retro	t STON	STON	STON	STOW
20:25:39	-1390	5	· 0.	9	1 0.5	0 0.1	Retro			Retro		Retroi					STON STON	STOW STOW

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LOCAL TIME (ref.)	ALTC	Elevator Position Left	Rudder Position (lower)	Aileron Position R inbd	Flap pos Trailing Inbd	Flap pos Trailing OUTBD	Set 1	Leading Edge Lt. Set 2	Leading Edge Lt. Set 3	Leading Edge Lt. Set 4	Leading Edge Rt. Set 1	Set 2	Set 3	Leading Edge Rt. Set 4	Reverser Eng 1	Eng 2	Eng 3	Reverser Eng 4
CVR	(FEET)	(degrees)	(degrees)	(degrees)	(degrees)	(degrees)	(discrete)	(discrete)		(discrete)		(discrete)		(discrete)		(1-T/R)	(1-T/R)	(1-T/R)
20:25:40	-13230 -12960	0.2	-0.9 -0.9	-10.3	0.0 0.0		Retrct	Retrct	Trans	Retrot	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:25:41	-12555	0.2 0.2	-0.9	·17.2 ·1.6	0.0 0.0 0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	STOW	STOW	STOW
20:25:42	- 12015	0.3	-0.9 -0.9	-27.6	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct		STOW	STOW	STOW
20:25:43	-11745 -11475	0.2 0.0	-0.9	-17.4 -16.6	0.0 0.0 0.0	0.0		Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	STOW STOW	STOW	STOW STOW
20:25:44	-11070	0.2	.0.9 .0.9	-16.4	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STON	STOW	STOW
20:25:45	-10530 -10125	0.3 0.3	.0.9	·17.0 ·17.4	0.0	0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct		STOW STOW	STOW STOW	STOW STOW
20:25:46	-9585	0.2	-0.9	-20.5	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:25:47	-9315 -8910	0.4 0.3	.0.9 .0.9	-17.4 -19.5	0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:25:48	-8370	0.3	-0.9	-29.0	0.0	0.0	Retrct	Retrct	Trans	Retrot	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STON
20:25:49	·7155 ·7155	0.3 0.3	·0.9 ·0.8	-29.0 0.6	0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct		STOW STOW	STOW STOW	STOW STOW
20:25:50	-6615	0.5	-0.7	-19.5	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrot	STOW	STOW	STOW	1
20:25:51	-5805 -5400	0.3 0.4	-0.8 -0.9	-17.0 -25.6	0.0	0.0	Retrct		Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrot Retrot		STOW STOW	STOW STOW	STOW STOW
20:25:52	-5265	0.1	-0.9	13.4	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:25:53	-4725 -3780	0.3 0.3	-1.0 -0.9		0.0	0.0	Retrct Retrct		Trans Trans	Retrct Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STON	STOW	STOW
20:25:54	-3510	0.5	-0.9	-17.0	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct Retrct					STOW STOW	l STOW	STOW STOW STOW
20:25:55	-3105 -2700				0.0	0.0 0.0 0.0	<u>}</u>	Retrct	Trans	Retrot	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	WOTZ
20:25:56	-2295	0.2	-0.9	-16.0		0.0	Retrct		Trans	Retrot Retrot	Retrot Retrot	Retrct Retrct	Retrot			STOW	STOW STOW STOW	STOW STOW STOW
20:25:57	-1890 -1485	0.1 0.0			0.0	0.0	Retrct		Trans							STOW	STOW	STOW
20:25:58	- 945	0.3	-0.9	-19.5	0.0	0.0	Retrct								: STOW		STOW	STOW
20:25:59	-540 0		-0.9	· 18.5 · 17.0	0.0	0.0	Retrot		Trans	Retrot	Retrct	Retrct	Retrot	Retrot	STOW	STOW	STON	STOW
20:26:00	405	0.2	.0.9	-17.0	0.0	0.0) Retrct						Retro			rl STO⊩	l STO⊮	l STOW
20:26:01	945 1350		0.8		0.0	0.0	Retro					Retrot	Retro			STO	STOW	STOW
20:26:02	1890			Į.	0.0	0.0	Retro	: Retrc1	Trans	Retro	Retrot	Retrct	: Retro	Retro	t STO	/I STO⊾	STON	STOW STOW
20:26:03	1890 2565		-0.1	18.0 -19.5	0.0	0.0	Retroi	Retro		Retro	Retrot			Retro		STO	STON	STOW
20:26:04	2835	0.2	2 -0.	9 -5.		0.0	Retro								STON	STON	≀i STO⊩	STOW STOW STOW
20:26:05	3375 3780				0.0	0.0	Retroi	Retroi	Trans				Retro	Retro	STON	STO	STON	ŠŤŎŴ
20:26:06	418	5 0.0	o · o .	9 12.	0.0 0.0 0.0	0.0	0 Retro										STON	

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LOCAL TIME (ref.) CVR	ALTC (FEET)	Elevator Position Left (degrees)	Rudder Position (lower) (degrees)	Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBD (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Set 3	Leading Edge Rt. Set 4 (discrete)	Eng 1	Reverser Eng 2 (1-T/R)	Eng 3	Reverser Eng 4 (1-T/R)
20:26:07	4590	0.2 0.2	-0.9	-17.4	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrot	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
	4725	0.2	-0.9	9.3	0.0 0.0 0.0	0.0	1											
20:26:08	5400	0.2	-0.8	-22.5		0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct		STOW STOW	STOW STOW	STOW STOW STOW
20:26:09	5805 5940	0.0 0.0	-0.8 -0.9	-17.4	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	ŠTÓW	STOW	STOW	STON
	33.0	7.4	V. 2		0.0	0.0												
20:26:10	5940	0.2	-0.9	·18.0 ·20.1	0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	I STOW	STOW STOW STOW
20:26:11	7020 7290	0.1 0.0	·1.0	-26.4	0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	210W
			ļ	10.0	0.0	0.0	L	No.	Trans	Retrct	Retrot	Retrct	Retrot	Retrct	CTALL	STAU	STOL	CT/ND
20:26:12	7560 8100	·0.2	-0.9	-24.1	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans Trans		Retrct	Retrct	Retrct	Retrot	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW
20:26:13	8640	0.0		-20.3	0.0	0.0	Recite	Recite		, active								2.5
20:26:14	9045	0.0	-0.8	-19.5 -25.3	0.0	0.0	Retrct		Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct		STOW STOW	STOW STOW	STOW STOW
20:26:15	9315 9720	0.0	-0.7	-21.1	0.0		Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:26:16	9990	0.0	-0.8		0.0 0.0 0.0	0.0	Retrct Retrct		Trans Trans	Retrct Retrct		Retrct Retrct		Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
	10205		-	10.3	0.0	0.0		Retrot	Trans	Retrot	Retrct	Retrct	Retrct	Retrot	STON	STOW	MOTS	STOW
20:26:17	10395 10800 11205	0.2 0.0 0.2	1 .0.9)	0.0	0.0		1	Trans	1	ļ	1		Retrot	STOW	STON	STOW	
20.20.10	11100			12.0	0.0	0.0	Retrct	Retrct				Retrct	Retrct	Retrct	STÓW	STON	STOW	STOW
20:26:19	11475	0.0	-0.9	3.2		0.0	Retrct	Retrot	Trans	Retrct	Retrct	Retrct	Retrct	Retrot	STOW	STOW	STOW	STOW
20:26:20	11880 12285	0.0	-0.9	12.4 11.4	0.0 0.0 0.0	0.0	Retrot							Retrot Retrot		STOW STOW	NOTS I	STOW STOW
20:26:21	12555	.0.3	-0.9	6.5	0.0	0.0	Retrct	Retrot	Trans	Retrot	Retrot	Retrot	Retrot	Retrot	STOW	STON	STON	STOW
20:26:22	12960		-0.9	0.0		0 <u>.0</u>	Retrct									STO		STOW
		0.2		-26.0	0.0	0.0)	Retrot	Trans	Retrot	Retrot	Retrot	Retrot	Retrot	STOW	STON	STON	STOW
20:26:23	13770	0.4			0.0 0.0	0.0	Retrct	Retrot	Trans	Retrot	Retrot	Retrot	Retrct	Retrot	STON	STO	STOW	STOW
20:26:24	14175 14445	0.3 0.2	-0.1	11.6	5 0.0	0.0	Retrot	Retrot Retrot								STON STON	STON STON	STOW STOW
20:26:25	14850	0.2	-0.	9 -0.4	0.0	0.0	Retro	Retro	Trans	Retro	Retro	Retro	Retrct	Retro	STON	STO	STON	STOW
20:26:26	15120	0.2	0.	9 -19.5	5 0.6	0.0	0 Retroi									STON		STOW STOW
	15525	0.3	<u>`</u>	-17.0	0.	0.0	o l	Retro	11 4113	Retro	Recici	, Recirci	Recirc	, meere	310.	, ,,,,,	1	3.0
20:26:27	15795	0.3	3 ·0.			0.0	0 Retro	t Retro	Trans	s Retro	t Retro	t Retro	Retroi	Retro	t STO	STON	1	
20:26:28	16200 16470		3] ∙0.	8 ·18.0 ·15.0	0. 6 0. 0.	0 0.1 0 0.1	0 Retro						Retro			STO STO	OTS OTS	STOM STOM
20:26:29	16875	s 0.:	3 .0.	6 -4.:		0 0.1	0 Retro	t Retro	t Trans	s Retro	t Retro	t Retro	Retro	Retro	t STON	STO	NOT2	STOW
20:26:3						0	0 Retro											
	17280	0.:	3 -0.	5 12.	0. 0. 0.	ol o	n I	Ketre	L IFAN	Keire	Recre	Keire	Recirci	Netic	3,0	3,0	3,0	310
20:26:3	1 1741	5 0.	2 ∙0.	7 3.		0 0.	0 Retro	t Retro	t Trans	s Retro	t Retro	t Retro	t Retroi		1	1		l.
20:26:3	2 1755 1782		3 .0.		4 0. 6 0.	0.	0 Retro									STO	W STON	STOW STOW
		<u> </u>			<u> </u>	o o.	0	1	<u> </u>	<u> </u>	1	<u> 1 </u>	<u>.i</u>	1	1			

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LOCAL TIME (ref.)	ALTC	Left	Rudder Position (lower)	Aileron Position R inbd	Flap pos Trailing Inbd	Flap pos Trailing OUTBD	Set 1	Leading Edge Lt. Set 2	Leading Edge Lt. Set 3	Leading Edge Lt. Set 4	Leading Edge Rt. Set 1	Leading Edge Rt. Set 2	Leading Edge Rt. Set 3	Leading Edge Rt. Set 4	Eng 1	Reverser Eng 2	Eng 3	Eng 4
ĊVŔ	(FEET)	(degrees)	(degrees)		(degrees)	(degrees)		(discrete)	(1-T/R)	(1-T/R)	(1-T/R)	(1-T/R)						
20:26:33	17955	0.2	-0.9	-29.0	0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:26:34	18090 18090	0.4 0.2	-1.0 -1.1	-23.5 11.6	0.0 0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:26:35	18225	0.1	-1.1	-19.9	0.0 0.0	0,0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:26:36	18225 18360	0.2 0.2	-1.1 -1.1	-23.5 -22.1	0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:26:37	18360	0.2	-0.9		0.0 0.0 0.0	0.0	Retrot	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct Retrct	Retrot	Retrct Retrct Retrct	Retrct Retrct Retrct	STOW STOW STOW	WOTZ WOTZ WOTZ	WOTZ WOTZ WOTZ	STOW STOW STOW
20:26:38	18360 18360	0,2 0.2	-0.9 -0.7	-16.6 -18.0	0.0	0.0	Ť T	Retret	Irans	Recice	Retret	Recirco	Retret	Recret	310#	310#	310	310#
20:26:39	18360	0.3	-0.7		0.0 0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct Retrct	Trans Trans Trans	Retrct Retrct Retrct	Retrct Retrct Retrct	l Retrct	Retrct Retrct Retrct	Retrct Retrct Retrct		STOW STOW STOW	STOW STOW STOW	STOW STOW STOW
20:26:40	18225 18225	0.3 0.0	-0.7 -0.7			0.0)	Recircu	11 9113	RELICE	Recici	Retict	Recice	Recice	3.0	3.0	3104	3.00
20:26:41	17145	0.4	-0.9		0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans		Retrct	Retrct	Retrct	Retrct Retrct	I STO⊌	I STOM	STOW STOW STOW	STOW STOW STOW
20:26:42	17955 17820	0.2 0.2	-1.0 -1.1	-17.4 11.0	0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STON	STON	STOW	STOW
20:26:43	17685	0.5	·1.0	.22.1	0.0	0.0	Retrct						Retrct Retrct	Retrot Retrot			STOW	STOW STOW
20:26:44	17415 17280	0.3 0.2	·0.9	·21.7 ·23.1	0.0	0.0	Retrct				Retrot			Retrot		STOW	STOW	STOW
20:26:45	17010 15930	0.3	-0.7 -0.8	ł	0.0	0.0 1 0.0	Retrct Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrot Retrot Retrot	STO ₄	STON STON STON	STOW STOW STOW	rl STOW
20:26:46	16740	0.5	-0.9		0.0	0.0		Retree	11 0113	Retre	, Recirco	, Ketice		, incorpor	3,00	3.0	3,00	1 3,5
20:26:47	16470		1	1	0.0	0.0	Retrct Retrct		: Trans	Retrot	: Retrct	: Retrot	Retrct	Retrct	: STO	STOW	STON	STON STON STON
20:26:48	16335 16065	0.3 0.2	.0.9	15.6	0.0	0.0		Retrot	Trans	Retro	Retrct	Retro	Retrct	Retrot	STO	STON	STOW	STOW
20:26:49	15795	0.1	-0.9	-8.5	0.0 0.0 0.0	0.0	Retrct	Retrot Retrot							STON	STON STON	STON STON	STOW STOW
20:26:50	15660 14445	0.4 0.2	-0.9		0.0	0.0) Retrct	Retrot	Trans	Retro	Retrot	Retro	Retrot	Retrot	STÖ	STO	STON	STOW
20:26:51	15120	0.1	-0.7	7 3.9		0.0				Retro						STO	STON	
20:26:52	14985 14715		.0.1 .0.5	9 ·27.0	0.0	0.0	Retrct	Retrot Retrot							STO	STON	STO	STOW
20:26:53 20:26:54	14580	0.0	1	-27.0	0.0	0.0	0 Retrot	Retro	t Trans	il Retro	t Retrct	t Retro	Retro	: Retro	t STO	4 STO	STON	STON STON
20.20.34	14175				0.0	0.0	Ö						1					1
20:26:55	13095	0.0	-0.5	9 -19.1	0.0	0 0.1	0 Retro	Retro							STO	STO	STO	STON
20:26:56	1	0.1	-0.	-20.1 9 -27.6	0.1 6 0.1 0.1	0.0	0 Retroi	Retro	Trans		Retro	t Retro	Retroi	Retro	STO	STO STO	STOV STOV	STOM
20:26:57	13500	0.3	٠٥.	9 -23.5	0. 5 0.	0 0.	0 Retro				t Retro					STON	STO	STO
20:26:58	1336	0.1	·0.	9 -28.	6 0. 0. 0.	0 0.	0 Retro	Retro	t Trans	s Retro	t Retro	t Retro	Retro	Retro	STO	STO	STO	STON

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LOCAL TIME (ref.)	ALTC	Position Left	Rudder Position (lower)	Aileron Position R inbd	Flap pos Trailing Inbd	Flap pos Trailing OUTBO	Leading Edge Lt. Set 1	Leading Edge Lt. Set 2	Leading Edge Lt. Set 3	Leading Edge Lt. Set 4	Leading Edge Rt. Set 1	Leading Edge Rt. Set 2	Leading Edge Rt. Set 3	Leading Edge Rt. Set 4	Eng 1	Eng 2	Reverser Eng 3	Reverser Eng 4
CVR	(FEET)	(degrees)	(degrees)	(degrees)	(degrees)	(degrees)	(discrete)		(1-T/R)	(1-T/R)	(1-T/R)							
20:26:59	12960	0.0	-0.7	-19.9 -19.5	0.0 0.0 0.0		\	Retrot Retrot	Trans Trans	Retrct Retrct	Retrct Retrct	Retrot Retrot	Retrct Retrct	Retrot Retrot	STOW	STOW	STOW	STOW STOW
20:27:00	12825 12825	0.0 0.0	·0.8 ·0.7	-14.0	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:27:01	12690	0.0	-0.8	8.3 12.0	0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct		STOW STOW	STOW STOW	STOW STOW
20:27:02	12555 12555	0.0	-0.9 -0.9	12.6	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:27:03	12420	-0.2 0.0	.0.9	12.0 4.9	0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct		STOW STOW	STOW STOW	STOW STOW
20:27:04	12285	0.0	.0.9 .0.9	-19.5		0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:27:05	12285 12150	0.0 0.0	.0.9 .0.9		0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct		STOW STOW	STOW STOW	STOW STOW
20:27:06	12150 12015	-0.1	.0.9 .0.9		0.0 0.0 0.0	0.0 0.0 0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	l	STOW	l	
20:27:07	12015	·0.2 0.0	-0.9	-19.5 -19.5	0.0	0.0	Retrct	Retrct Retrct		Retrot Retrot	Retrot Retrot	Retrct Retrct	Retrot Retrot	Retrot Retrot		STOW	STOW	STOW
20:27:08	12015	0.0	-0.9			0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:27:09	11880 11880	0.0 0.0	.0.9 .0.9		0.0 0.0 0.0	0.0	Retrct Retrct		Trans Trans		Retrct Retrct		Retrct Retrct	Retrct Retrct		STOW STOW	STOW STOW	STON STON
20:27:10	11745	0.0	-0.9 -0.9	4.9	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:27:11	11745 11610	0.0 0.0	-0.9	-5.3 9.7	0.0	0.0 0.0 0.0	Retrct Retrct	Retrot Retrot		Retrct Retrct	Retrct Retrct		Retrct Retrct	Retrot Retrot		STOW STOW	STOW STOW	STOW
20:27:12	11475	0.1	-0.9	-3.7	0.0	0.0	Retrct	Retrot	Trans	Retrot	Retrct	Retrct	Retrot	Retrot	STOW	STOW	STOW	STOW
20:27:13	11340 11205	0.1 0.0	·0.9 ·0.9	12.0 -22.5	0.0 0.0 0.0	0.0	Retrct Retrct						Retrct Retrct			STOW STOW	STOW STOW	STOW STOW
20:27:14	11205	0.1	-0.9		0.0	0.0	Retrct	l	1		1.	ì	Retrct	<u> </u>	I	STOW	İ	1
20:27:15	11070 10935	0.2 0.2	37.8		0.0	0.0	Retrct	Retrot Retrot			Retrot Retrot	Retrot Retrot	Retrot Retrot			STOW STOW	STOW STOW	STOW
20:27:16	10800	0.2	-0.8	10.3	0.0	0.0) Retrct	Retro	Trans	Retrot	Retrct	Retrct	Retrct	Retro	STOW	STON	STON	STOW
20:27:17	10665 10530	0.3 0.1	.0.9 -0.9	· 23.5 · 23.1	0.0	0.0	Retrot				Retrot Retrot	Retrct Retrct	Retrot Retrot	Retroi	STON STON	STON STON	STON	STOW STOW
20:27:18	10395	0.2	.0.9	-24.7	0.0	0.0	Retrot	Retro	Trans	Retrot	Retrot	Retrct	Retrot	Retro	STON	STOW	STON	STOW
20:27:19	10260 10125	0.1 0.1	-0.8 -0.9	-28.4	l 0.1	0.0	Retrot		Trans Trans			Retrot	Retrot	Retro	STON	STON	STON	STOW
20:27:20	10125	0.0	-0.9	-28.8	0.	0.0	Retrot	Retro	Trans	Retro	Retrot	Retrot	Retro			STON	STON	STOW STOW STOW
20:27:21	9990 9855		-0.9	·19.1	0. 0.	0.0	Retroi	Retro	t Trans	Retro	Retrot Retrot	Retrot Retrot						STOW
20:27:22	9720		1		0. 0. _0.	0.0 0.0 0.0	Retroi	t Retro	Trans	Retro	Retro	t Retrct	Retro	Retro	ti STON	STON STON	/ STOW	STON STON
20:27:23	9720 9720	0.0	-0.1	8 -19. 8 -19.	5 0. 0.	0 0.0	0	Retro	t Trans	Retro	Retroi	Retro	Retro	Retro	STOW	STO	STO	STOW
20:27:24			1	1	0.	0 0.0 0 0.0	0 Retro	t Retro	t Trans	s Retro	Retro	t Retro	Retro	t Retro	t STOW	/ STO	/ STO	/ STOW
20:27:2	9720 9720	0.0		9 6. 9 12.			0 Retro	t Retro	t Tran:	s Retro	Retro	t Retro	Retro	Retro	t STON	STON	STO	STOW

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LOCAL TIME (ref.)		Elevator Position Left	Rudder Position (lower)	Aileron Position R inbd	Flap pos Trailing Inbd	Flap pos Trailing OUTBD	Leading Edge Lt. Set 1		Leading Edge Lt. Set 3	Leading Edge Lt. Set 4	Leading Edge Rt. Set 1	Leading Edge Rt. Set 2	Leading Edge Rt. Set 3	Leading Edge Rt. Set 4	Eng 1	Reverser Eng 2 (1-T/R)	Reverser Eng 3 (1-T/R)	Reverser Eng 4 (1-T/R)
CVR	(FEET)	(degrees)	(degrees)	(degrees)	(degrees)	(degrees)	(discrete)	(discrete)	(discrete)	(discrete)	(discrete)	(discrete)	(discrete)	(discrete)	(1-1/K)	(1-1/K)	(1-1/K)	(1·1/K)
20:27:26	9585	0.0	-0.9	3.9	0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW	STOW STOW STOW
20:27:27	9450 9315	0.0 0.3	·0.9 ·0.9	12.6 8.3	0.0 0.0 0.0	0.0 0.0 0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	ŠTÓW	ŠTOW	STOW	WOTZ
20:27:28	9045	0.1	-0.9	10.7	0.0	0.0	Retrct	Retrct	Trans Trans	Retrot Retrot	Retrct Retrct	Retrot Retrot	Retrot Retrot	Retrot Retrot	STON STON	STOW STOW	STOW STOW	STOW STOW STOW
20:27:29	8100 8640	0.2 0.2	·0.8 ·0.7		0.0	0.0 0.0 0.0	Retrct	Retrct Retrct	Trans	Retrot	Retrot		Retrot		STOW	STOW	STOW	STOW
20:27:30	8370	0.2	-0.7	-29.4	0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct	Retrct Retrct	Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW STOW
20:27:31	8100 7965	0.1 0.3	·0.7 ·0.7	·21.9 ·29.8		0.0	d .	Retrct	Trans	Retrot	Retrct	Retrot	Retrct	Retrct	STOW	STOW	STOW	2100
20:27:32	7695	0.1	∙0.7	-29.0	0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct	Retrct Retrct	Retrct	Retrct Retrct	Retrct	STON STON STON	STOW STOW STOW	STOW STOW	STOW STOW STOW
20:27:33	7425 6615	0.0 0.2	-0.7 -0.8	·18.5		j 0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOM	STOW	STOW
20:27:34	7020	0.1	.0.8	2.6	0.0 0.0 0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STON STOW	STOW STOW	STOW STOW STOW	STOW STOW STOW
20:27:35	6750 6480	0.1 0.2	·0.8 ·0.7	8.3	0.0 0.0	0.0 0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:27:36	6345	0.0	-0.7	8.9	0.0	0.0	Retrct	Retrot			Retrot Retrot	Retrct Retrct	Retrct Retrct	Retrot Retrot	STOW	STON STON STON	STON STON STON	STON STON STON
20:27:37	6210 6210	0.1 0.1	-0.9 -0.9	1.0	0.0	0.0	Retrct								STOW	STON	STON	STOW
20:27:38	5535	0.2	-0.9	12.0 -27.0	0.0) O.O) Retrct	Retrot	Trans Trans		Retrot Retrot	Retrot Retrot	Retrct Retrct		STOW	STON	STON STON	STOW STOW
20:27:39	5940 5805	0.0 0.0	.0.9 .0.9	-23.5		0.0	Retrct											STOW
20:27:40	5670	0.0	-0.9	· 27 .6 · 26 .6	0.0	0.0	Retrct						Retrct Retrct	Retrot Retrot	STOW	STOW STOW	STOW STOW	
20:27:41	5535 5400	0.2	-0.9	-24.1	0.0	0.0	Retrct	Retrct	Trans	Retrot	Retrct	Retrct	Retrct	Retrot	STOW	STON	STON	STOW
20:27:42	ĺ	0.2	1	1	0.0 0.0 0.0	0.0	Retrct				Retrot Retrot	Retrot Retrot	Retrot Retrot	Retrot Retrot	STON STON	STON STON	NOTS I	WOT2 WOT2
20:27:43	4860	0.2		4.3				Retrot	Trans	Retro	Retrot	Retrot	Retrct	Retro	STON	STO	STON	STOW
20:27:44	4995 4860		-0.9	12.0 11.6	0.0	0.0	Retrot	Retrot Retrot			Retrot Retrot		Retrot Retrot		STON STON	STON STON	STON	STOW STOW
20:27:45	4455	0.2	-0.9	9	0.0	0.0	0 Retroi	1	1	1		J.		l	1			
20:27:46		0.2		9 8.3	0.0	0.1	0 Retro											
20:27:47	4185	0.1	0.1	8 -5.1	7 0.1	0.0	0 Retroi	Retro	Trans	Retro	Retro	Retro	Retrot	Retro	STON	STO	stor	STOW
20:27:48	3645 3780	0.2	-0.1	B 11.0		0.0	0 Retroi	Retro								OTS I		STOW STOW
20:27:49	3240) i	1 .0.	8	3 0.	0 0.0 0 0.0	0 Retro	1	I _	1	ļ.		1		1			
20:27:5		0.3	.0.		0.	0 0.	0 Retroi	Retro								STON		
20:27:5	1 270	0.3	2 .0.	8 -22.	1 0.		0 Retro	Retro	t Trans	s Retro	t Retro	t Retro	Retro	Retro	t STO	STO	STO	STOM

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LOCAL TIME (ref.)	ALTC	Elevator Position Left	Rudder Position (lower)	Aileron Position R inbd	Flap pos Trailing Inbd	Flap pos Trailing OUTBO	Leading Edge Lt. Set 1	Leading Edge Lt. Set 2	Leading Edge Lt. Set 3	Leading Edge Lt. Set 4	Leading Edge Rt. Set 1	Leading Edge Rt. Set 2	Leading Edge Rt. Set 3	Leading Edge Rt. Set 4		Reverser Eng 2	Reverser Eng 3	Reverser Eng 4
CVR	(FEET)		(degrees)	(degrees)	(degrees)		(discrete)		(discrete)	(discrete)	(discrete)	(discrete)	(discrete)	(discrete)	(1·T/R)	(1·T/R)	(1-T/R)	(1-T/R)
20:27:52	2430 2295	0.3 0.2	-0.8 -0.8	·19.1 ·23.1	0.0 0.0 0.0 0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:27:53	1890	0.2	-0.8	-26.6	0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:27:54	1620	0.2	-0.7 -0.7	-19.5	0.0 0.0	0.0	1100100	Retrct	Trans	Retrot	Retrct	Retrct	Retrot	Retrct	STOW STOW	STOW	STOW	STOW
	1350	0.2		-19.5	0.0	0.0	1	Retrct	Trans	Retrct	Retrot	Retrct	Retrct	Retrct	310W	210M	310#	3104
20:27:55	1080	0.2	-0.8	-19.5	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	WOTZ	STOW
20:27:56	810 540	0.1 0.0	·0.8 ·0.8	-16.0 -18.9	0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	WOT2 WOT2	STOW STOW	STOW STOW
20:27:57	270	0.2	∙0.9	-8.3	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:27:58	-270	0.2 0.1	-0.9 -0.8		0.0 0.0 0.0	0.0	Retrot Retrot		Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:27:59	-540	0.0	-0.8	11.6	0.0	0.0	ol .	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOM	STOW	STOW
20:28:00	-810 -945	0.0 0.2	.0.8 .0.8	10.5 -29.4	0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct		Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:28:01	-1215	0.0	-0.9	11.6	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:28:02		0.1	-0.9	-21.9	0.0 0.0	0.0	Retrot		Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
	-1620	0.0	-0.9	12.0	0.0	0.0)	Retrct	Trans	Retrot						ļ		
20:28:03	-1890	0.0	-0.8	-30.0	0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct Retrct		Retrct Retrct		STOW STOW	STOW STOW	STOW STOW	STON STON STON
20:28:04	-2160 -2295	0.1 0.2	8.0- 8.0-		0.0 0.0 0.0	0.0	Retrot	Retrct	Trans	Retrct		Retrot	Retrot	Retrot	STOW	STOW		STOW
20:28:05	-2565	0.2	-0.8	-27.6		0.0	Retrot		Trans	Retrot	Retrot	Retrot	Retrot	Retrot	STOW STOW	STON	STOW STOW	STOW
20:28:06	-2835 -2970	0.1 0.1	-0.8 -0.9		0.0	0.0	Retrot									STOW		STOW
20:28:07	-3105	0.1	-0.9	12.6		0.0	Retroi						Retrct			STON		STON
20:28:08	-3240 -3510	0.0	-0.9 -0.9	12.0 4.9		0.0	Retro				Retrct Retrct		Retrct Retrct			STON	STON STON	STOW STOW STOW
20:28:09	-3780	0.3	.0.9	10.3	0.0	0.0	Retro	Retrot	<u>T</u> rans	Retrot			Retrot	Retrot	STOW	STON	STOW	STOW
20:28:10	-3915	0.4	-0.8		0.0	0.0	Retro		Trans Trans				Retrot Retrot			STON STON	STOW STOW	STOW STOW STOW
	-4185	0.1	0.7	-26.6	0.0	0.0	j											
20:28:11	-4320	0.0	.0.8	-13.0	0.0	0.0	Retro	Retro				Retrot	Retrot Retrot	Retroi	STOW STOW	STON	STOW STOW	STOW STOW STOW
20:28:12	-4455 -4725	0.2 0.2	.0.8 .0.8	-22.1 -22.5	0.0	0.0	Retro								STON	STOW	STON	STOW
20:28:13	-4860	0.2	-0.9	-21.1		0.0	0 Retro	Retro							STON	STO	STON	STOW
20:28:14	-5130 -5265	0.1 0.0		-21.5 -20.5		0.0	0 Retro				Retroi			Retro	STON	STON	STON	STOW STOW STOW
20:28:15	5 -5400	0.2	-0.	B -20.5		0 0.1	0 Retro										r STON	STOW
20:28:10		0.2	.0.1	8 11.4 8 -21.5		0 0.	0 Retro	Retro								STOV STOV	STON	STOW
20:28:1					0. 0. 0.	0 0 0 0	0 Retro 0 Retro	t Retro	t Trans	s Retro	t Retro	t Retroi	: Retroi	Retro	t∣ STO¥	r STO	/ STOW	/ STOW
20:28:1	8 -594	0.2	2 .0.	8 -29.	<u>8 0.</u>	VI 0.	0 Retro	t] Retro	t Tran:	s Retro	t Retro	t Retro	: Retro	, Ketrc	7 210	310	2106	2108

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LOCAL TIME (ref.) CVR	ALTC (FEET)	Elevator Position Left (degrees)	Rudder Position (lower) (degrees)	Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBD (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)	Eng 1	Reverser Eng 2 (1·T/R)	Reverser Eng 3 (1-T/R)	Reverser Eng 4 (1·T/R)
	-6210		·0.8	(degrees)	0.0		(discrete)	(disciete)	(discrete)	(discrete)	turser eter	(4130100)	(41361667	(4136.666)	(2-1/1/	12-17.67	12.00	
	-0210	0.2	.0.0		0.0	0.0]
20:28:19	-6210	0.2	-0.8	13.0 8.3	0.0 0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STON STON STON	STON STON STON
20:28:20	·5940 ·6480	0.4 0.2	·0.8 ·0.8	8.3 -20.1	0.0 0.0 0.0	0.0 0.0 0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrot	Retrct	STOW	ŠŤÓW	STOW	STOW
20:28:21	-5940	0.2	.0.9	-24.1	0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrot	Retrot	Retrot	Retrot	STOW	STOW STOW	STOW STOW	STOW
20:28:22	-6615 -6750	0.1 0.3	·0.9 ·0.8	·23.5 ·21.1	0.0 0.0 0.0 0.0	0.0	ll Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	STOW	STOW	STOW STOW STOW
20:28:23	-6885	0.3	-0.9	-19.5	0.0 0.0	i	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STON	STOW	STOW
20.20.23	0003	0.5		-19.9	0.0		Retrot	Retrct	Trans	Retrct	Retrct		Retrot	Retrct	STOW	STOW		STOW
20:28:24	-7020 -6615	0.0 0.0	·0.8 ·0.8	-21.9	0.0 0.0	0.0	Retrct	Retrct	Trans	Retrot	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:28:25	-7425	0.1	-0.8	-18.3	0.0	0.0		Retrct		Retrot	Retrct				STOW	STON	STOW	STOW
				-30.0	0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	310	310	310	310#
20:28:26	-6885	0.2	-0.7	2.2	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOM	STOW
20:28:27	-7695 -7830	0.0 0.1	-0.7 -0.7	-29.0 -19.1	0.0	0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	WOTZ WOTZ	STON STON	STON STON	STOW STOW
20:28:28	-7965	0.0	·0.7	-19.1	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STON	STOW	STOW
20:28:29	-8235 -8370	0.0 0.3	·0.7 ·0.7		0.0 0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STON STON	STON STON	STON STON
20:28:30	-8505 -8100	0.0	.0.7 .0.7		0.0 0.0 0.0	0.0	Retrct	1	l	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STO	Į.	
20:28:31	-8910	0.0 0.0	-0.7	-18.9 -21.1	0.0 0.0 0.0 0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct		Retrct Retrct	Retrct Retrct	STOW	STON STON	STOW STOW	STON
20:28:32	·9180 ·9180	0.2	-0.7 -0.7	-24.7	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct		1	ļ	STON	
20:28:33	·9315	0.2 0.2	-0.8		0.0	0.0	Retrot		Trans Trans	Retrot Retrot					STOW STOW	STON STON	STON STON	STON STON
20:28:34	- 9585	0.1	.0.8 38.2 .0.7	-20.5	0.0	0.6	D Retrot	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STON	STON	STON
20:28:35	-9720 -9180	0.2 0.0	.0.7	·23.1 ·19.5	0.0 0.0 0.0	0.0	0 Retrct 0 Retrct			Retrot Retrot				Retrot Retrot	STOW STOW	STO	STON STON	STON
20:28:36	-9990	-0.2	-0.7			0.0	0 Retrot	Retrot	Trans	Retrot	Retrot	Retrot	Retrot	Retrot	STOW	STO	STON	STON
20:28:37	-10125 -10125	0.0 0.0	-0.8	12.6 9.9		0.0	0 Retroi			Retrot Retrot						STON STON	STON	STON STON
20:28:38	-10125	0.0	.0.8	12.0	0.0	0.1	0 Retroi	Ext	: Ext	Ext	Retro	Retrot	Retrct	Retro	STOW	STO	STON	STON
20:28:39	-10260 -10260	0.0	-0.8	·i'.	0.0 0.0 0.0	0.0	0 Retroi	Retrot Retrot	Trans Trans		Retroi Retroi	Retrot Retrot		Retroi Retroi	STOW	STON STON	STO	STO
20:28:40	-10260	0.0	.0.8	-23.5	0.0	0.1	0 I	Retrot	Trans	Retro	Retro	Retro	Retrot	Retro	STOW	STO	STON	STON
20:28:41	-10260 -10395	0.0	·0.9	-21.1 -19.9	0.0	0.	0 Retro	Retroi	Trans		Retroi	Retroi	Retrot	Retro	STON STON	STON STON	STO STO	STON
20:28:42	- 10395	0.0	.0.1	B ·20.1	0. 0. 0.	0 0. 0 0.	0 Retro	Retro	Trans	Retro	Retro	Retro	Retrot	Retro	STON	STO	r STO	STO
20:28:43						0 0 0.	0 Retro											

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LOCAL TIME (ref.) CVR	ALTC (FEET)	Elevator Position Left (degrees)	Rudder Position (lower) (degrees)	R inbd	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBO (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Set 1	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)	Eng 1	Reverser Eng 2 (1-T/R)	Reverser Eng 3	Reverser Eng 4 (1-T/R)
20:28:44	-10800	0.2	-0.8		0.0	0.0	Retrct	Retrct	Trans	Retrot	Retrct	Retrot	Retrct	Retrct	STOW	STOW	STOW	STOW
20:28:45	-11070 -11205	0.2	-0.8 -0.8	3.7	0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	WOTZ	STOW
20:28:46	-11475	0.6	-0.9		0.0	0.0 0.0 0.0	Retrct	Retrct	Trans	Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	STOW STOW	STOW STOW	STOW STOW STOW
20:28:47	-11745 -11880	0.4	-0.9 -0.9	·20.1 ·20.5	0.0		Retrot	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrot	STOW	STOW	STOW	STOW
20:28:48	-12150	0.4	-0.9	-21.1	0.0 0.0 0.0	0.0	Retrot	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STON	STOW STOW	STOW STOW	STON
20:28:49	-12285 -12420	0.5 0.5	-0.8 -0.9	11.6 -18.5	0.0	0.0 0.0	Retrct	Retrot	Trans	Retrot	Retrot	Retrot	Retrct	Retrot		STOW	STOW	STOW
20:28:50	- 12555	0.5	-0.9	.2.6	0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	STOW STOW	STOW STOW	STOM STOM STOM
20:28:51	-12690 -12420	0.5 0.4	.0.9 .0.9	-20.5 -26.0	0.0 0.0 0.0	0.0 0.0 0.0	Retrot	Retrot	Trans	Retrot	Retrct	Retrot	Retrot	Retrot		STOW	STOW	STOW
20:28:52	- 12285	1			0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans	Retrot Retrot	Retrct	Retrct Retrct	Retrct Retrct	Retrct	STOW	STOW STOW	STOW STOW STOW	STOW STOW STOW
20:28:53	-12555 -13095		-1.0		0.0 0.0 0.0	0.0 0.0 0.0	Retrct	Retrot	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:28:54	-13230	0.5	-0.9	12.0	0.0 0.0 0.0	0.0	Retrct	Retrot Retrot	Trans Trans	Retrct Retrct	Retrct Retrct				STOW	STOW	STOW	STOW
20:28:55	-13365 -13365	0.5 0.5	.0.8 .0.8	-20.9 -21.1	0.0 0.0 0.0	0.0	Retrct		Trans	Retrct	Retrct	Retrct	Retrct	Retrot	STOW	STON	STOW	STOW
20:28:56	}				0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct	Trans	Retrct Retrct		Retrct	Retrct Retrct	Retrct	STON	STOW STOW	I STOW	STOW STOW STOW
20:28:57	-12960 -12555		.0.8 .0.8		0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrot	STÓW	STOW	STOW	STOW
20:28:58	- 13095	0.2	-0.9	-26.6	0.0	0.0	Retrot		Trans Trans	Retrot Retrot	Retrct Retrct	Retrct	Retrot Retrot		: STOW	STON STON	STOW STOW	NOT2 WOT2 WOT2
20:28:59	-12825 -12690		-0.8	·13.0 11.6	0.0	0.0	,	Retrot	Trans	Retrct	Retrot	Retrct	Retrct	Retro	STOW	STOW	STON	STOW
20:29:00	-12420	0.0	-0.8	9.3		0.0	Retrct						Retrot			STON	STOW	WOTZ WOTZ WOTZ
20:29:01	-12150 -11880		.0.8 .0.8	-21.5	0.0	0.0 0.0 0.0	Retrot		Trans		Retrot		Retrot	Retro	STOW	STON		STOW
20:29:02	i			-19.5	0.0	0.0	Retrct Retrct	Retrot	Trans	Retrot	Retrot	Retrot	Retrot	Retro	t] STOM	STO	/STON	STOW
20:29:03	-11340 -11070		0.1	-19.5	0.0	0.0		Retrot	Trans	Retrot	Retrot	Retrct	Retrct	Retro	t STO	STON	STON	STOW
20:29:04	-10125	-0.3	-0.:	·20.5		0.0	Retrct								t STON	STON	STON	STOW STOW STOW
20:29:05	- 10665 - 10395			8 -18.5	0.0	0.0	Retrot									STOV	STO	STOW
20:29:06	-10260	0.0	-0.	· 15.6 · 18.3		0.0	Retrot		Trans Trans							STON	STON	STOW STOW
20:29:07	- 9990 - 9990		-0. -0.	11.0	0.0	0.0	Retro	Retro	Trans	Retroi	Retro	Retrot	Retro	Retro	t STON	STO	STO	STOW
20:29:0	- 985	5 0.4	-0.	8 ·29.0 ·23.5	0.0	0.0	Retro								t STOV	STON STON	STON	STOW STOW
20:29:0	9 -918				1 0.	0.0) Retro	Retro	t Trans	Retro	Retro	Retro	Retro	Retro	t STO	STO	STO	STOW
20:29:1		5 0.		8 -30.			Retro	t Retro	t Trans	s Retro	Retro	Retro	Retro	t Retro	t STON	/ STO	/ STO	STON

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LOCAL TIME (ref.) CVR	ALTC (FEET)	Elevator Position Left (degrees)	Rudder Position (lower) (degrees)	Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBD (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)	Eng 1		Eng 3	Reverser Eng 4
	(1661)	(degrees)	(degrees)	·16.0	0.0	0.0	Retrot	Retrot	Trans	Retrot	Retrot	Retrot	Retrot	Retrot	STOW	STOW	STOW	STOW
					0.0	0.0								·				
20:29:11	-10260 -10260 -10395	0.4 0.4	-0.8 -0.7 -0.7	·13.4	0.0 0.0 0.0	0.0		Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	STOW	WOTS WOTS	STOW
20:25:12	-10393	0.5	-0.7	12.0	0.0 0.0	0.0	l Retrct	Retrct	Trans	Retrct	Retrot	Retrot	Retrct	Retrct		STOW	STOW	STOW STOW
20:29:13	·10530	0.5	-0.7 -0.7	6.5	0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:29:14	-10665	0.5 0.2	-0.8	-19.5 11.0	0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STON STON
20:29:15		0.3	-0.8	-19.5		0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:29:16	-10800 -10935	0.3 0.4	-0.8 -0.7	·20.5 ·18.0	0.0 0.0 0.0	0.0		Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	WOT2	STOW STOW	STOW STOW
20:29:17	-10800	0.3	-0.7 -0.8	11.6	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:29:18	- 10800 - 9990	0.3	.0.8	-21.9 -3.0	0.0	0.0	Retrct	Retrct Retrct	Trans Trans	Retrot Retrot	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct		STOW	STON	STOW
20:29:19	-10665	0.3	.0.8	-21.1	0.0 0.0 0.0	0.0 0.0			Trans	Retrct	Retrot	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:29:19	-10530	0.4	-0.9		0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	1	STOW	STOM
	-9855	0.2		-18.5	0.0	0.0	1	Retrot	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:29:21	-9990	0.2	-0.9	7.5		0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct			1		i
20:29:22	-10125 -9855	0.0	·0.9 ·0.9		0.0	0.0	Retrct	Retrct Retrct	Trans Trans		Retrct Retrct	Retrct Retrct	Retrct Retrct				STOW STOW	STOM
20:29:23	9045	0.0	.0.8	-17.0	0.0	0.0	Retrct	Retrct	Trans	Retrot	Retrct	Retrct	Retrct	Retrot	STOW	STON	STOW	
20:29:24	· 9450 · 9180	0.0 0.0	-0.9 -0.8	-19.5 -20.1	0.0 0.0	0.0 0.0 0.0	Retrot Retrot				Retrct Retrct			Retrot Retrot		STON	STOW STOW	STOM STOM
20:29:25	-8910	-0.4	-0.8	9.9	0.0	0.0	Retrct	Retrct	Trans	Retrot	Retrct	Retrct	Retrot	Retrot	worz :	STON	WOTZ	STOW
20:29:26	-8505 -8505	-0.4	-0.7 -0.9		0.0	0.0	Retrot			Retrot Retrot	Retrct Retrct	Retrct Retrct	Retrct Retrct					
20:29:27	-8235	-0.2	-0.8	-26.6	0.0	0.0)	Retrot	Trans	Retrct	Retrct	Retrct	Retrct	Retrot	STOW	STON	STOW	STOW
20:29:27	-8100 -7830	.0.3	-0.8	-18.0	0.0	0.0	Retrot	Retrct	Trans	Retrot	Retrot	i				1	1	1
	7.00			3 -3.7	0.0	0.0		Retro	Trans	Retrot	Retrct	Retrot	Retrot	Retro	STON	STON	STOM	unt2
20:29:29	7695	0.2	I .	1	0.0	Di 0.0		1			Retrct	Retrot	Retrct	Retro	t STOW	/ STO	/ STOW	STOW
	·7155	-0.4	.0.9	11.0	0.0	0.0	5		Ì		1							
20:29:31	- 7020	-0.3	-0.9	-18.3	3 0.0	0.0	Retro								EI STON	STO	1 STO	STOW
20:29:32	-6750 -6750		·0.9		0.1 0.1 0.1	0 0.0 0 0.0 0 0.0	Retro							Retro	STON	STO	r Stok	STOW
20:29:33	-661	0.2	.0.8	13.4	0. 0. 0.	0 0.0	D Retro		Trans	Retro	Retroi	Retro			t STON			STOW STOW
20:29:34	·6619				0.0	0 0.0 0 0.0	0 Retro			Retro	Retro	Retro		Retro	STO	STO	STON	STOW STOW
20 22 22				9 -20.9	0. 0. 5. 0.	0 0.4	0 [t Retro	t Trans	s Retro	Retro	t Retroi	Retro	Retro	t STON	STA	STON	STON
20:29:39 20:29:30	1	5 0.4	4 -0.	9 -19.	1 0.	0 0.0 0 0.0	0 Retro 0 Retro	t Retro	t <u>T</u> rans	s Retro	t Retro	t Retro	: Retro	t Retro	t STO	∤ STO\	STON	STOW

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LOCAL TIME (ref.) CVR		Elevator Position Left (degrees)	Rudder Position (lower) (degrees)	IR inbd	Flap pos Trailing Inbd (degrees)	OUTBO	iSet 1	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Set 2	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)	1 ⁻ 1			Reverser Eng 4 (1-T/R)
20:29:37	-6345	0.2	-0.9	0.6	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:29:38	-6480 -6615	0.0 0.3	-0.9 -0.8	4.7	0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	STOW	STOW STOW	STOW STOW STOW
20:29:39	-6615	0.0	-0.8	11.6	0.0	0.0		Retrct	Trans	Retrct Retrct		Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STON
20:29:40	-6615 -6615	0.0 0.2	-0.8 -0.8		0.0 0.0 0.0	0.0 0.0 0.0		Retrct Retrct	Trans Trans	Retrot		Retrot	Retrct	Retrct	STOW	STOW	STOW	STOW
20:29:41	-6615	0.2	-0.8	1	0.0 0.0 0.0	0.0		Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct		STOW STOW	STOW STOW	STON STON STON
20:29:42	-6615	0.2	-0.7 -0.8	-19.9 -27.4	0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STON	STOW	STOW	STOW
20:29:43	-6615	0.0	-0.8		0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct Retrct	Trans <u>T</u> rans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	WOT2 WOT2	STOW STOW	I STO₩
20:29:44	-6480 -6345	0.0 0.1	-0.8 -0.8		0.0 0.0 0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	ŠŤÓŴ	STOW	STOW
20:29:45	-6345	0.2		11.0	0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct						Retrct Retrct	Retrot Retrot	STOW STOW	STOW STOW STOW	STOW STOW	STOW
20:29:46	-6210 -6210	0.3 0.3	-0.9	-20.5	0.0 0.0 0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	2104	STOW	210M
20:29:47	-6345	0.3	-0.9	·22.5	0.0	0.0	Retrct	Retrct Retrct	Trans Trans		Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	STOW STOW STOW	STOW STOW STOW	
20:29:48	-6345 -6480	0.0 0.0		-30.0	0.0 0.0 0.0	0.0	Retrct		Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	WOTZ	STOW	STOW
20:29:49	-6480	0.0	.0.8	·27.0 10.3	0.0	0.0 0.0 0.0	Retrct		Trans Trans	Retrot Retrot		Retrct Retrct	Retrct Retrct			STOW STOW	STON	STOW
20:29:50	-6615 -6750	0.0			0.0	0.0	Retrct	Retrct	Trans	Retrot	Retrct	Retrct	Retrct	Retrot	STOW	STON	STON	STOW
20:29:51	· 7020	0.1	-0.7	0.0		0.0	Retrot						Retrct Retrct			STON	STON STON	STOW STOW
20:29:52	·7155 ·7425	0.0	-0.9	-19.1	0.0	0.0	Retrot	Retrot	Trans	Retro	Retrct	Retrct	Retrct	Retrot	STOW	STON	STON	
20:29:53		0.3	-0.8	·24.9 ·28.8	l 0.6	0.0	Retrot Retrot				Retrct Retrct		Retrct Retrct			STON STON	STON	WOTS I
20:29:54	- 7965 - 8235	0.3	·0.8	B	0.0	0.0	Retrot	L		11.00		1	1			STOR	1	
20:29:55	-8640	0.3	-0.9	10.3		0.0	Retrot		Trans Trans							STON STON	STON STON	STOW
20:29:56	-8910 -8505		·0.9	9 10.3		0.0	Retro	1		1	1	i	1 .		i	1	l .	1
20:29:57				9 -19.5 -20.5	0.	0.0	Retro									STON STON	STON	STON STON
20:29:58	· 9855		.0.1	8 -19.5	0. 0. 0.	0.0) Retro	Retro	Trans	Retro	Retro	Retro	Retrct	Retro	STON	STON	STO	1
20:29:59			-0.1		0. 0. 0.	0 0.0 0 0.0 0 0.0	Retro	Retro								STON	STON	H STON STON
20:30:00	- 10530	0.:	3 .0.	8 11.0	0.	0.0	Retro	Retro	t Trans	Retro	Retro	Retro	Retrot	Retro	STO	STO	STO	STOW
20:30:0	· 10530 · 9855		4 -0.		0. 0. 0.	0 0.0 0 0.1	0 Retro	Retro										
20:30:0	- 10665	0.:	2 .0.		5 0. 0.	0 0.1	0 Retro	Retro	t Trans	Retro	Retro	t Retro	Retro	Retro	t STO	STO	STO	w STOW

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LOCAL TIME (ref.) CVR	ALTC	Elevator Position Left (degrees)	Rudder Position (lower)	Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBD (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Set 4		Reverser Eng 2 (1-T/R)	Reverser Eng 3 (1-T/R)	Reverser Eng 4 (1-T/R)
	30000	(degrees)	l		1	(degrees)									l .	·	·	
20:30:03	-10800	0.0	-0.8	·23.1 ·21.1	0.0 0.0 0.0		Retrot Retrot	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	WOT2	STOW	STOW	STOW
20:30:04	-10800	0.0	-0.7	-19.1	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:30:05	-10665 -10665	0.0 -0.3	-0.8 -0.7	1.6 12.0	0.0 0.0	0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:30:06	· 9720	-0.2	-0.8	-29.4	0.0 0.0 0.0 0.0	0.0 0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:30:07	-10395 -10395	0.0 0.0	-0.8 -0.9	·21.1 ·19.5	0.0	0.0 0.0	Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOM STOW	STOW STOW	STOW STOW	STOW STOW
20:30:08	-10260	-0.1	.0.9	-21.1	0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrot	STOW	STOW	STOW	STOW
20:30:09	·10260 ·10260	-0.2	·0.9		0.0 0.0 0.0	0.0 0.0 0.0	Retrct Retrct	Retrct	Trans Trans	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	WOTS WOTS		WOTS WOTS	STOW
20:30:10	- 10125	-0.2	-0.8	-30.4	0.0 0.0 0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:30:11	-9315 -10125	0.0 0.0	·0.8 ·0.8	-26.6 -13.0		0.0	Retrct Retrct	Retrot Retrot	Trans Trans	Retrot Retrot	Retrct	Retrot	Retrct	Retrct	STOW	STOW	STOW	STOW
20:30:12	· 9990	-0.1	-0.8	13.0	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STOW STOW
20:30:13	.9990 .9990	0.0 0.0	·0.9 ·0.8	12.0 -10.7	0.0	0.0		Retrct	Trans	Retrct	Retrot	Retrct	Retrct	Retrot	STOW	STOW	STOW	STOW
20:30:14	- 9990	İ	-0.9	i	0.0	0.0	Retrct Retrct	Retrot Retrot	Trans Trans	Retrot Retrot	Retrct Retrct	Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW STOW	STOW STOW STOW
20:30:15	-9990 -9315	0.0	-0.8 -0.8	-22.5 -28.0	0.0 0.0 0.0	0.0		Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STOW
20:30:16	-9990	0.0	-0.8	-18.3	0.0	0.0	Retrct		Trans	Retrct Retrct		Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW	STOW STOW	STOW STOW	STOW STOW STOW
20:30:17	- 9990 - 9990				0.0 0.0 0.0	0.0 0.0 0.0	Retrct	Retrct Retrct	Trans Trans	Retrot	Retrot	Retrot	Retrot	Retrot	STOW	STOW	STOW	STOW
20:30:18	-9990	l	.0.9	l	0.0	0.0	Retrot Retrot	Retrct			Retrct	Retrct	Retrct	Retrct	STOW	STOW STOW		WOT2
20:30:19	-10125 -10125	0.0	-0.9	·26.0	0.0	0.0		Retrct	Trans	Retrot	Retrot	Retrct	Retrot	Retrct	STOW	STOW	STOW	STOW
20:30:20	-10260	ŀ	-0.9		0.0	0.0	Retrct Retrct	Retrct	Trans		Retrct	: Retrct	Retrot	Retrct	: STOW	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW
20:30:21	-10260 -10395		·0.8	11.6	0.0	0.0	<u> </u>	Retrct	Trans	Retrot	Retrot	Retrct	Retrct	Retrot	310	310	3104	3104
20:30:22	- 10530	0.0	-0.9	.27.0	0.0	0.0	Retrct									STOW	STON	STON STON STON
20:30:23	-10665 -10800		.0.9 .0.9		' 0.0	0.0	Retrct	Retrot					Retro		STOW	STOW	STON	STOW
20:30:24	-11070	0.0	-0.8	9.9		0.0	Retrot									STON	STON STON STON	STON STON STON
20:30:25	-11205 -11340	0.0	-0.8 -0.7		0.0	0.0	Retrot						Retro		STON	STOW	STON	STOW
20:30:26		1	·		0.0	0.0	Retro	Retro	Trans	Retro	: Retro	Retrot	Retro	Retrot	: STOW	STON STON	STON STON	STOW STOW
20:30:27	-11610 -11745	-0.2	.0.		0.0	0.0		Retro	: Trans	Retro	Retro	Retrct	Retro	Retro	STON	STON	STON	STOW
20:30:28				-19.	5 0.0	0.0	Retroi	t Retro	Trans	Retro	Retro	t Retrct	Retro	Retrot	: STO	/ STON	II STON	STOW STOW STOW
	1228	5 0.2	.0.	8	0.0), ŏ, č	0		1	1	<u> </u>	1	<u> </u>	<u> </u>	1	<u> </u>	1	

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LOCAL TIME (ref.) CVR		Elevator Position Left (degrees)	(lower)	Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBD (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)	Eng 1	Reverser Eng 2 (1-T/R)	Reverser Eng 3 (1-T/R)	Reverser Eng 4 (1-T/R)
				ļ	0.0	0.0						-	<u> </u>					
20:30:30	-12420	0.0	-0.8	-17.4 -29.4 -23.5	0.0 0.0 0.0	0.0	Retrct	Retrct Retrct	Trans Trans		Retrct Retrct		Retrct Retrct		STOW	STOW STOW	STOW	STON STON STON
20:30:31	· 12555 · 12825	.0.1 .0.2	-0.8 -0.8	-23.5	0.0 0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STON
20:30:32	-12825	0.0	-0.9	-19.1 -17.8	0.0 0.0 0.0	0.0	Retrct	Retrct Retrct			Retrct Retrct			Retrct Retrct	STOW	STOW	STOW	STON STON
20:30:33	-13095 -13230	0.0 0.0	.0.8 -0.9	-23.1	0.0 0.0	0.0 0.0 0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STO
20:30:34	-13500	0.0	-0,8		0.0	0.0		Retrct			Retrct		Retrct		STOW	STOM	STOM	STO
				-18.5	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrot	Retrct	Retrct	Retrct	STOW	STON	STOW	STON
20:30:35	-13635	0.0	·0.8 ·0.9	9.7	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STO
20:30:36	-13905 -14040	0.0 0.2	.0.9	.7.9 11.6	0.0 0.0 0.0	0.0	Retrct Retrct	Retrct Retrct	Trans Trans		Retrct Retrct	Retrct Retrct	Retrct Retrct	Retrct Retrct	STOW STOW	STOW STOW	STOW STOW	STON STON
20:30:37	-14175	0.0	.0.9	2.2	0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrct	Retrct	Retrct	Retrct	STOW	STOW	STOW	STON
20:30:38	-14445 -14715	0.3 0.3	-0.9 -0.9		0.0 0.0 0.0	0.0	Retrct Retrct	Retrot Retrot	Trans Trans		Retrct Retrct		Retrct Retrct	Retrct Retrct	STOW STOW	STON STON	STOW STOW	STON STON
20:30:39		0.3	-0.8		0.0	0.0	Retrct	Retrct	Trans	Retrct	Retrot	Retrct	Retrct	Retrct	STOW	STON	STOW	STO
20:30:40	-15120 -15390	0.3 0.2	-0.8	·2.6 13.0	0.0	0.0 0.0	Retrct Retrct	Retrct Retrct								STON STON	STON	STON STON
20:30:41	-15390 -15660	0.1	-0.9	-19.5	0.0	0.0) Retrct	Retrot	Trans	Retrot	Retrct	Retrct	Retrct	Retrct	STON	STON	STOW	STON
20:30:42		0.3	.0.9 .0.8	·20.5	0.0	0.0	Retrct	Retrot Retrot										STON
		1			0.0	0.0						1						
20:30:43	i	0.2	-0.9 -0.9	.8.1	0.0	0.0	0			1	Į.			1		į.		l
20:30:44	-15795 -14985	0.2	-0.9	· 18.5 · 26.4	0.0	0.0	Retrct	Retrot Retrot							STOW STOW	STON	STON	STO
20:30:45	- 15930	0.2	.0.9		0.0	0.0	0 Retrct	Retrot	Trans	Retrct	Retrot	Retrot	Retrct	Retrot	STOW	STON	MOT2	STO
20:30:46	- 15930 - 15930	0.3 0.0	-0.9	-21.5 -17.4	0.0 0.0 0.0	0.0	Retrct Retrct	Retrot Retrot		Retrot Retrot	Retrot Retrot	Retrot Retrot	Retrct Retrct		STOW STOW	STON STON	STON STON	STO STO
20:30:47	-15930	0.0	-0.8	3 -14.4		0.0	0 Retrct	Retro	Trans	s Retrct	Retrot	Retro	Retrot	Retro	STON	STON	STON	STO
20:30:48	· 15930 · 15795			- 15.2 - 17.8	0.0	0.1	0 Retrot 0 Retrot	Retro		Retrot Retrot						STON STON	STON STON	STO
20:30:49	14985	0.0	-0.8	13.6	0.0	0.1	0 Retrct	Retro	Trans	Retroi	Retro	Retro	Retro	Retro	STOV	STO	STON	STO
20:30:50	15795	0.2			0.0	0.0	0 Retrct											
20:30:51					0.0	0.	0 0		Ì									
20:30:5		0.0	.0.9	9 -23.1	0.0 0.0	0. 0. 0. 0.	0 Retrot 0 Retrot	Retro	t <u>T</u> ran:	s Retro	Retro	t Retro	Retro	Retroi	t STON	STON	STO	STO
20.20.5	15024		-0.1	8 -18.0	0.	n	ö	t Retro	t Trans	s Retro	Retro	t Retro	Retroi	Retro	t STON	STO	STO	STO
20:30:5	4 - 15120	0.:	-0.	8 -20.9	0.	0.	0 Retro	Retro	t Trans	s Retro	Retro		1				1	
	- 1620	0.3	2 -0.	9 -17.	0.	0 0.	o	Retro	t Tran	s Retro	1							
20:30:5	5 - 1647	0.3	2 -0.	8 12.				t Retro	t Tran	s Retro	t Retro	t Retro	t Retro	t Retro	t STO	4 STO	M STON	STO

TWA Flt. 800, B747-131, Takeoff to End of Data Tabular Data No. 2, Date Printed: January 10, 1997, National Transportation Safety Board

TIME (ref.)		Position Left	(lower)	Aileron Position R inbd (degrees)	Inbd	Flap pos Trailing OUTBD (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Set 4	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)	Eng 1	Reverser Eng 2 (1·T/R)		Reverser Eng 4 (1-T/R)
20:30:56	-16605 -16740	0.3 0.5	-0.8 -0.7	5.9 -19.5	0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	Retrct	Retrct	Trans	Retrct	Retrct Retrct	Retrot Retrot	Retrct Retrct	Retrct Retrct	STOW STOW	STOW	STOW STOW	STOW
20:30:57 20:30:58	·17145	0.4	-0.7 -0.7	·10.3	l 0.0	0.0	Retrct Retrct Retrct	Retrct Retrct Retrct	Trans Trans Trans	Retrct Retrct Retrct	Retrct Retrct Retrct	Retrct	Retrct Retrct Retrct	Retrct Retrct Retrct	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW
20:30:59 20:31:00		0.4 0.3 0.4 0.4	-0.7	-18.5 -23.7 -17.2 -19.9	0.0 0.0 0.0	0.0	Retrct Retrct Retrct	Retrct Retrct Retrct	Trans Trans Trans	Retrot Retrot Retrot	Retrct Retrct Retrct	Retrct	Retrct Retrct Retrct	Retrct Retrct Retrct	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW
20:31:01		0.3 0.3 0.2		-23.1 -19.5 -19.5	0.0 0.0 0.0	0.0 0.0 0.0 0.0	Retrct Retrct Retrct	Retrct Retrct Retrct	Trans Trans Trans	Retrct Retrct Retrct	Retrct Retrct Retrct	Retrct	Retrct Retrct Retrct	Retrct	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW	STON STON STON
20:31:03 20:31:04	-18495	0.2	·0.7	-3.7 4.9 11.0	0.0 0.0	0.0 0.0 0.0	Retrot Retrot	Retrct	Trans Trans Trans	Retrct Retrct Retrct	Retrct Retrct Retrct	Retrot	Retrct Retrct Retrct	Retrct Retrct Retrct	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW
20:31:05 20:31:06	ł	0.0	-0.8 -0.8	13.0	0.0	0.0 0.0 0.0	Retrct Retrct	Retrct	Trans Trans Trans	Retrct Retrct Retrct	Retrct Retrct Retrct	Retrot Retrot Retrot	Retrct Retrct Retrct	Retrct Retrct Retrct	STOW STOW STOW	STOW STOW STOW	STOW STOW STOW	STON STON STON
20:31:07	-18900 -18900	0.2	-0.8 -0.8	-18.5 -18.0 7.5	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	Retrct Retrct Retrct	Retrct Retrct	Trans Trans	Retrct Retrct		Retrot Retrot		Retrct	STOW STOW STOW			
20:31:09		i		0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	Retrot Retrot Retrot	Retrct	Trans Trans Trans	Retrct	Retrct Retrct Retrct	Retrct	Retrct Retrct Retrct	Retrot	STOW STOW STOW	STOM STOM STOM	STOW STOW STOW	STOW STOW STOW
20:31:11 20:31:12		0.2	-0.8	-17.8 -24.1	0.0 0.0 0.0	0.0	Retrot		Trans Trans		Retrct Retrct						STOW	STOW STOW

TWA Flt. 800

B747-131, Landing At JFK TABJFK1, Created: January 31, 1997

National Transportatin Safety Board

FDR Lapse	ASL ATE.	IAS	Pitch Angle	Elevator Position	Mag. Heading	Roll Angle	Rudder Position	Angle of Attack	EPR Engine 1	EPR Engine 2	EPR Engine 3	EPR Engine 4	Long. Accel	Vert. Accel.	VHF	Pitch Trim Stab
Time (sec.)	(FEET)	(KNOTS)	(degrees)	Right		(degrees)	(upper)		i -	(ratio)	(ratio)	(ratio)	(g)	(g)		Pos (degrees)
0.0	612.00 632.00	140	1.4 1.8	-0.3 0.0	308 306	·1 ·1	-0.18 0.00 0.09 0.18	777	1.02	1.04	1.04	1.07	0.05 0.05 0.05 0.05	0.98 0.98 0.99 0.99 1.00	Off	6
1.0	622.00	141 140	1.8	0.0	306	-1	0.18 0.27	7 7 7	1.02 1.02	1.04 1.04	1.04 1.04	1.07 1.07	0.05 0.05 0.05 0.05 0.05 0.06 0.06	1.00 1.01 1.01 1.02	Off Off	6
2.0	617.00 607.00	141	2.2 2.5	0.1 0.0	306 306	·2 ·2	0.27 0.36 0.54	7 7 7	1.02	1.04	1.03	1.07	0.06 0.06 0.06 0.06 0.06 0.06 0.06	1.03 1.03 1.04 1.04	off	6
3.0	602.00	141 142	2.9	0.0	305	-2	0.54 0.45 0.36	7 7	1.02 1.03	1.04 1.04	1.04 1.04	1.07 1.08	0.06 0.06 0.07 0.07	1.04 1.04 1.04 1.05 1.05	Off Off	6
4.0	592.00 587.00	142	2.9 2.9	·1.5 ·1.7	305 305	.3 .2		7 7 7	1.04	1.05	1.05	1.08	0.07 0.07 0.07 0.07 0.07 0.06	1.05 1.06 1.06 1.06 1.05 1.04	off	6
5.0	577.00	134 141	2.9	-1.6	305	-3	0.99 0.99 0.99	7	1.04 1.04	1.05 1.05	1.05 1.05	1.09 1.09	0.07 0.06	1.04 1.03 1.02 1.00 0.99	Off Off	6
6.0	572.00 567.00	141	2.5 2.2	-1.0 -0.4	305 305	-2 -2	0.99 0.99 1.08 1.08	7 7 7	1.04	1.05	1.05	1.09	0.06 0.06 0.06 0.06 0.06 0.06 0.06	0.99 0.99 0.98 0.97 0.98 0.98	Off	6
7.0	557.00	141 141	2.5	-0.5	305	-1	1.08 1.08 0.99	7 7	1.04 1.04	1.05 1.05	1.05 1.05	1.09 1.09	0.06 0.06 0.06	0.98 0.98 0.99 1.01	Off Off	6
8.0	552.00 547.00	142	2.5 2.2	·1.5 ·2.1	305 305	:1 :1	0.72 0.54 0.72	7 7 7	1.04	1.05	1.05	1.09	0.06 0.06 0.06 0.06 0.06 0.07 0.06 0.06	1.02 1.02 1.03 1.02	Off	6
9.0	537.00	142 134	2.2	-2.2	305	-1	0.72 0.72 0.72	7 7 6	1.04 1.04	1.05 1.05	1.05 1.05	1.09 1.09	0.06 0.06 0.06 0.06 0.06 0.06 0.06	1.02 1.01 1.00 0.99	off Off	6
10.0	527.00 522.00	142	1.8 1.4	-2.1 -1.7	305 305	·1 0	0.90 0.90 0.99	6 6		1.05	1.05	1.09	0.06 0.06 0.05	1.00 0.99 0.98 0.96 0.96 0.98	Off	6
11.0	517.00	142 142	1.1	-1.3	305	0	0.99 1.08 1.08	6 6	1.04	1.05 1.05	1.09 1.05	1.09 1.08	0.05 0.05 0.05 0.05 0.05 0.05	0.97 0.97 0.97 0.97 0.98 0.98 0.98	off off	6
12.0	507.00 497.00	142	1.1 1.1	36.9 -0.8	305 305	0	0.90 0.90 0.72	6 6 6	1.04	1.05	1.05	1.09	0.05 0.05	0.98 0.98	0ff	6
13.0	487.00	142 142	1.1	-0.3	305	0	0.72 0.72 0.81 0.90	666	1.04 1.04	1.05 1.05	1.05 1.05	1.09 1.08	0.05 0.05 0.05 0.05 0.05 0.05 0.06	0.98 0.98 0.98 0.98 0.98 0.98 0.99	off off	6 6
14.0	477.00 467.00	136	1.4	-0.4	305 305	0	1.08 1.08 0.99	7	1.04	1.05	1.05	1.08	0.06 0.06 0.06	1.00 1.00 1.03	Off	- 6
15.0	457.00	143 144	1.8	·0.5 -0.4	305	1	0.99 0.99 0.90 0.90	7 7 7	1.04 1.04	1.05 1.05	1.05 1.05	1.08 1.08	0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.06	1.03 1.03 1.03 1.04 1.03 1.03	Off Off	6
16.0	442.00 437.00	143	2.2 2.2	-0.3	305 305	1	0.72 0.54 0.54	7 7 6	1.04	1.05	1.05	1.08	0.06 0.06 0.06 0.06	1.02 1.02 1.03 1.04 1.03	Off	6
17.0	432.00	144 142	2.2	·0.7 ·1.3	305	0	0.36 0.27 0.18	677	l	1.05 1.05	1.05 1.05	1.08 1.08	0.06 0.06 0.06 0.06	1.03 1.03 1.02 1.02	Off Off	6
18.0	422.00 412.00	142	2.2	-1.3	305 305	0	0.27 0.36 0.45	7 8 7	1.04	1.05	1.04	1.08	0.06 0.06 0.06 0.06 0.07	1.01 1.00 1.00 1.02 1.03	Off	6
19.0	402.00	134 141	2.2 2.2	-1.6 -2.1	305	0 1	0.45 0.54 0.54	7	1.04 1.04	1.05 1.05	1.05 1.05	1.08 1.08	0.07 0.07 0.06	1.04 1.07 1.05	Off Off	6 6
20.0	392.00 387.00	142	1.4	-2.1	306	1	0.54 0.54 0.54 0.54	7 7 7 6	1	1.05	1.05	1.08	0.06 0.06 0.06 0.06 0.06 0.05 0.05	1.03 1.01 1.01 1.00 0.99 0.98	Off	6
21.0	377.00	142 144	1.1 0.7	1.5	306 306	1	0.54 0.54 0.54	6	1.04	1.05 1.04	1.04 1.04	1.08 1.08	0.05 0.05 0.05	0.98 0.97 0.98 0.98	Off Off	6
22.0	367.00	144	0.7	0.0	306	0	0.54 0.54 0.54	6 6 7	1.03	1.04	1.04	1.08	0.05 0.05 0.05 0.05 0.05 0.05 0.05	0.98 0.98 0.98 0.98 1.00	Off	6
23.0	357.00 352.00	144 136	1:4 1:4	0.0 -1.3	306 306	0	0.54 0.72	7	1.03 1.03	1.04 1.04	1.04 1.04	1.08 1.08	0.06 0.06 0.06	1.02 1.04 1.05 1.05	Off Off	6 7
24.0	342.00	144	1.8	-1.0	306	-1	0.81 0.72 0.63 0.90	6 6	1.03	1.04	1.04	1.08	0.06 0.06 0.06 0.05 0.05 0.06 0.06	1.05 1.05 1.04 1.03 1.03	Off	6

FDR Lapse	HSL ATE.	TAS	Pitch Angle	Elevator Position	Mag. Heading	Roll Angle	Rudder Position	Angle of Attack	EPR Engine 1	EPR Engine 2	EPR Engine 3	EPR Engine 4	Long. Accel	Vert. Accel.	VHF	Pitch Trim Stab Pos
Time (sec.)	(FEET)	(KNOTS)	(degrees)	Right (degrees)	(degrees)	(degrees)	(upper) (degrees)	(degrees)	(ratio)	(ratio)	(ratio)	(ratio)	(g)	(g)		(degrees)
25.0	332.00 327.00	144 144	1.8 1.8	-1.0 -1.4	306 306	0	0.99 1.26 1.26	6 6 6	1.03 1.03	1.04 1.04	1.04 1.04	1.08 1.08	0.05 0.05 0.05 0.05 0.05	1.03 1.03 1.02 1.01 1.01	off off	7
26.0	317.00	144	1.8	-1.3	306	. 0	1.26 1.35	6	1.03	1.04	1.04	1.08	0.05 0.05 0.05	1.01 1.01 1.01 1.00 1.00	Off	7
27.0	307.00 302.00	144 144	1:4	·1.5 ·0.5	306 306	00	1.17 1.08 0.81 0.81	6 6 6	1.03 1.03	1.04 1.04	1.04 1.03	1.08 1.08	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05	1.00 0.98 0.98 0.99 0.99 0.98 0.98	Off Off	7 6
_28.0	292.00	142	1.4	0.0	306	0	0.63 0.36	6	1.03	1.04	1.03	1.08	0.04 0.05 0.05	0.98 0.98 0.98	Off	
29.0	282.00 272.00	142 142	1.8 2.5	0.0 ·0.3	306 306	·1 ·2	0.00 0.00 0.00 0.00	7 7 7 8	1.03 1.03	1.04 1.04	1.03 1.03	1.08 1.08	0.05 0.05 0.05 0.05 0.06 0.06 0.06	0.98 0.99 1.00 1.03 1.04 1.05	off off	7
30.0	262.00	142	2.9	-1.3	306	-2	0.18 0.18	8	1.03	1.04	1.03	1.07	0.07	1.08 1.11 1.12	077	7
31.0	252.00 247.00	146 144	3.2 2.9	·2.5 ·3.1	306 306	-3 -2	0.09 0.27 0.72 0.54	9 8 6	1.03 1.03	1.04 1.04	1.03 1.03	1.07 1.07	0.08 0.08 0.07 0.08 0.07 0.07	1.12 1.11 1.11 1.13 1.13	Off Off	7
32.0	247.00	144	2.2	-3.3	306	-1	1.17 1.53	6	1.03	1.04	1.03	1.07	0.05 0.05 0.04	1.08 1.01 0.98	Off	7
33.0	242.00 222.00	144 143	1.4 1.8	-0.4 -0.2	306 309	00	2.07 2.07 2.07 2.07	566	1.03 1.03	1.04 1.04	1.03 1.03	1.07 1.07	0.04 0.03 0.04 0.04 0.04	1.08 1.01 0.98 0.94 0.93 0.95 0.96	Off Off	7
34.0	222.00	142	1.8	-0.2	306	0	1.44 0.72	6 66	1.03	1.04	1.03	1.07	0.04 0.04 0.05	0.98 0.98 0.99 1.00	Off	7
35.0	222.00 212.00	142 143	2.2 2.5	·0.2 ·2.2	306 306	·1 ·1	0.00 0.00	7 6	1.03 1.03	1.04 1.04	1.03 1.03	1.06 1.07	0.05 0.05 0.05 0.05	1.00	Off	7
36.0	202.00	144	2.5	-2.4	306	-1	0.18 0.36 0.27 0.18	8 6 6	1.03	1.04	1.03	1.07	0.0655443344656666666666666666666666666666	1.05 1.04 1.05 1.04 1.03 0.99 0.97	Off Off	7
37.0	197.00 192.00	142	2.2 1.8	-1.6 -0.5	306 306	- <u>1</u>	0.54 0.90	7	1.03	1.03	1.03	1.07	0.04 0.04 0.04	0.97 0.98 0.99	Off	7
38.0	172.00	142 142	1.8	-1.1	309	-1	1.08 1.08 0.90 0.54	6 5 7 8	1.03	1.03	1.03	1.07 1.07	0.05 0.04 0.04 0.05 0.05	0.98 0.99 0.99 0.98 0.97 0.98 0.99	off off	7
39.0	172.00 162.00	144	1.8 1.8	-0.5 0.0	306 306	:1	0.36 0.54 0.54 0.72	6 6 7	1.03 1.02	1.03 1.03	1.03	1.07	0.05 0.06 0.05	1.03	Off	7
40.0	162.00	142 142	2.2	-1.5	306	-1	0.54 0.72 0.81 0.72	7 7 6 6	1.02	1.03	1.03 1.02	1.07 1.07	0.05 0.05 0.05 0.05 0.05	1.03 1.02 1.03 1.03 1.04	Off Off	7
41.0	152.00 142.00	142	2.2 2.2	-1.5 -0.2	306 306	·1 0	1.26 1.53 1.71 1.71	6666	1.02	1.03	1.02	1.07	0.04 0.04 0.04 0.04 0.04	1.04 1.02 0.99 0.98 0.98 0.98 0.98 0.99 1.01	Off	77
42.0	137.00	142 140	2.2	-0.3	305	0	1.08 0.72	7	1.02 1.02	1.03 1.03	1.02 1.02	1.07 1.07	0.05 0.04 0.05	0.99 1.01 1.02	Off Off	7
43.0	122.00 117.00	140	2.5 2.5	0.0 ·0.8	308 305	1	0.63 0.72 0.54 0.18	8 7 7	1.02	1.03	1.02	1.07	0.0550565555555555555555555555555555555	1.01 1.01 1.02 1.06 1.06 1.05	Off	7
44.0	107.00	142 140	2.5	-0.4	305	.1	0.00	- 7	1.02 1.02	1.03	1.02 1.02	1.07 1.07	0.05 0.05 0.05	1.02	Off Off	
45.0	102.00 92.00	142	2.5 2.9	0.9 1.1	305 305	·1 ·1	0.45 0.54 0.63	7 7 7 7 7 7	1.02	1.03	1.02	1.07	0.05 0.05 0.05 0.06 0.06 0.06 0.06	1.01 1.02 1.02 1.02 1.04 1.04 1.05	Off	7
46.0	87.00	140 140	2.9	0.0	305	-1	0.72 0.54 0.72	7 7 7	1.02 1.02	1.03 1.03	1.02 1.02	1.07 1.07	0.06 0.06 0.06	1.05 1.04 1.04	Off Off	7
47.0	77.00 72.00	140	2.9 2.9	0.0 0.6	305 308	0 ·1	0.72 1.26 1.08 0.45	7 8 7 7	1.02	1.03	1.02	1.07	0.06 0.06 0.06 0.06 0.07 0.06 0.06	1.04 1.04 1.03 1.04 1.02 1.02	Off	7
48.0	62.00	138 142	2.9	2.5	305	-1	0.54 1.17 1.53	7 7 8	1.02 1.02	1.03 1.03	1.02 1.02	1.07 1.07	0.05 0.06 0.06 0.06 0.05 0.05	1.03 1.02 1.01 1.03 1.03	off off	7
49.0	57.00 52.00	140	3.2 3.6	2.7 4.1	305 306	0 1	1.62 1.53	7 7	1.02	1.03	1.03	1.07	0.05 0.06 0.07	1.01 1.01	. Off	7

FDR Lapse	MSL ATE.	IAS	Pitch Angle	Elevator Position	Hag. Heading	Roll Angle	Rudder Position	Angle of Attack	EPR	EPR	EPR Engine 3	EPR Engine 4	Long. Accel	Vert. Accel.	VHF	Pitch Trim Stab
Time	(FEET)	(KNOTS)	(degrees)	Right	(degrees)	(degrees)	l(upper)	(degrees)		(ratio)	(ratio)	(ratio)	(g)	(g)		Pos (degrees)
50.0	47.00	139 138	3.6	2.0	306	1	2.52 2.61 4.32 7.92	7 7 7	1.02 1.02	1.03 1.03	1.03 1.02	1.07 1.07	0.06 0.06 0.06 0.07 0.06	1.04 1.05 1.06 1.06 1.06 1.05 1.04	Off Off	7
51.0	42.00 37.00	134	4.0	6.3 3.3	307 307	1	9.27 6.75 -0.63	,	1.02	1.03	1.03	1.07	0.07	1.00		
52.0	37.00	136 134	5.0	4.6	311	0	-0.63 -1.53 0.18 0.99	8 7 8 6	1.02 1.02	1.03 1.03	1.03 1.03	1.07 1.07	0.07 0.08 0.09 0.09 0.09 0.09 0.09 0.08 0.06 0.06 0.06 0.06 0.06 0.06 0.06	1.02 1.06 1.11 1.08 1.09 1.05	1 077	7,
53.0	37.00 32.00	134	5.0 5.0	7.1 6.5	309 309	-1 -1	0.90 0.72 0.72	7	1.00	1.01	1.01	1.04	0.09 0.08 0.08	1.05 1.03 1.02 1.01	Off	7
54.0	27.00	132 133	5.4	3.6	309	-1	0.72 0.90 1.35 1.35	7 7 7	1.00 1.01	1.01 1.01	1.01 1.01	1.03 1.03	0.07 0.07 0.06 0.06 0.06	1.01 1.03 1.05 1.03 1.02 1.03	Off	7 7
55.0	27.00 22.00	132	5.4 5.0	6.9 4.9	309 308	-1 -1	1.17	7 8 7	1.00	1.01	1.01	1.03	0.06 0.06 0.06	1.04 1.02 1.02	011	7
56.0	22.00	132 130	4.7	5.0	307	-1	1.26 1.17 0.81 0.54	7 7 7	1.00 1.00	1.01 1.01	1.01 1.01	1.03 1.03	0.05 0.06 0.04 0.04 0.03	1.04 1.05 1.03 1.03 1.06	orr orr	7
57.0	22.00 27.00	124	4.3 4.3	5.6	307 307	0 1	4.41 5.49 5.40	7 6 6	1.01	1.01	1.01	1.03	0.05 0.04 0.03 0.00 0.01	1.06 1.00 1.01 0.99 0.96 0.99 1.02	Off	7
58.0	22.00	128 129	4.3	5.3 5.1	307	3	6.21 7.65	6 6 5	1.01 1.00	1.01 1.01	1.01 1.01	1.02 1.02	0.01 0.00 0.02	0.96 0.99 1.02	orr orr	7
59.0	27.00 27.00	124	4:3 4:7	0.4	308 309	3	7.83 7.83 7.20 2.70	5 6 6	1.00	1.01	1.01	1.02	0.00 0.00 0.02 0.01 0.01	1.13 1.07 1.05 1.06 1.00 1.01 0.96 0.97	Off	7
60.0	27.00	124 124	4.3	·0.8	310	4	2.88 3.60 6.93	7 6 7	1.01 1.01	1.01 1.02	1.01 1.01	1.05 1.05	0.00 -0.01 -0.01	0.96 0.97 0.97	Off Off	7
61.0	22.00 22.00	124	4.3	4.3	310 310	2	6.93 11.07 11.97	7 6 5 5	1.01	1.03	1.01	1.06	-0.01 -0.02 -0.01 -0.02 -0.02 -0.02 -0.03	0.97 0.95 0.98 1.01 1.06 1.08 1.09	Off.	7
62.0	22.00	118 120	5.0 5.0	2.3 4.4	311	.1	10.80 4.50 6.66	6 7 7	1.02 1.07	1.03 1.03	1.01 1.01	1.07 1.11	-0.03 -0.07 -0.07 -0.06	1.04 1.00 1.01 1.00	Off Off	7
63.0	22.00 22.00	120	5.0	6.8	311	-1	12.69 14.94 12.60	5 7 5	1.15	1.04	1.01	1.17	-0.03 -0.07 -0.06 -0.07 -0.06 -0.06 -0.07 -0.07	1.00 1.01 1.00 1.00 1.03 1.00 0.99 1.01	Off	7
64.0	22.00	110 112	5.0 5.4	7.4 3.2	311 313	·2 ·2	13.05 7.38 3.60	5	1.19 1.23	1.04 1.04	1.01 1.01	1.22 1.25	-0.07 -0.05 -0.07 -0.07	1.01 1.06 1.08 1.05 0.99 0.97	off off	7 7
65.0	17.00	110	5.0	9.2	312	-1	2.52 5.04	6 5	1.24	1.05	1.01	1.25	-0.06 -0.04 -0.04 -0.04	1.02	Off	7
66.0	17.00 17.00	106 105	4.7 5.0	11.1 11.4	312 311	0 1	6.12 11.61 13.05 13.77	6 5 7	1.25 1.25	1.06 1.06	1.01 1.01	1.26 1.27	-0.03 -0.04 -0.03 -0.04 -0.04	1.02 1.01 1.00 1.06 1.02 0.98 1.03 1.02	off off	7
67.0	22.00	110	5.4	9.7	311	1	14.76 17.01	7	1.26	1.07	1.01	1.27	-0.03 -0.03	1.03 1.02 1.03	Off	
68.0	17.00 17.00	104 100	5.8 5.8	8.9 7.3	310 310	0	16.56 14.67 14.31 14.22	7 5 6	1.25 1.26	1.09 1.11	1.01 1.01	1.27 1.26	-0.07 -0.07 -0.07 -0.04 -0.04 -0.03 -0.03 -0.03 -0.03 -0.03 -0.03 -0.03 -0.03 -0.03 -0.03	1.03 0.98 1.04 1.06 0.96 1.01 1.03	off Off	7
69.0	17.00	101	5.0	10.7	310	1	17.10 18.45	6	1.23	1.11	1.01	1.25	-0.01 -0.02 -0.02 -0.01	1.01 0.99 1.02	Off	
70.0	22.00 17.00	101 102	4.3 4.0	11.4 11.3	310 310	1	16.02 16.74 16.83 17.64	65 55 5	1.22 1.21	1.12 1.12	1.01 1.01	1.23 1.24	-0.02 -0.03 -0.02 -0.04	0.99 1.02 1.06 0.98 1.00 1.04 1.01	off off	7
71.0	17.00	93	3.2	11.6	311	1	25.29 25.83	3 3	1.21	1.12	1.01	1.24	-0.04 -0.04 -0.05 -0.03	0.96 1.01	Off	7
72.0	22.00 22.00	90 96	2.9 1.8	8.6 7.1	311 311	0	25.38 25.38 25.29	3 4 4	1.21 1.21	1.12 1.13	1.01 1.01	1.24 1.24	-0.05 -0.04	1.03 1.02 1.05 1.02 0.97 0.98	Off Off	7
73.0	22.00	92	0.4	8.7	311	0	26.01 26.46 26.82	3 3	1.21	1.13	1.01	1.23	0.05 0.06 0.06 0.06 0.08 0.10 0.09	0.98 1.03 1.02 0.99 1.03	off	7
74.0	17.00 22.00	92 88	-0.7 -0.7	5.8 -0.2	312 312	:1 :1	21.33 20.43	2 2	1.21 1.17	1.13 1.13	1.01 1.01	1.24 1.19	-0.10 -0.09 -0.10	1.03 1.01 1.00	- Off Off	7

FDR Lapse	MSL ATE.	IAS	Pitch Angle	Elevator Position	Mag. Heading	Roll Angle	Rudder Position	Angle of Attack	EPR Engine 1	EPR Engine 2	EPR Engine 3	EPR Engine 4	Long.	Vert.) VHF	Pitch Trim Stab
Time (sec.)	(FEET)	(KNOTS)	(degrees)	Right (degrees)		(degrees)	(upper) (degrees)	(degrees)	1	(ratio)	(ratio)	(ratio)	(g)	(g)		Pos (degrees)
75.0	22.00	90	-0.7	-4.8	312	-1	19.71 14.04 1.08 1.17	1 1 0 2		1.13	1.01	1.16	-0.13 -0.14 -0.16 -0.14 -0.16 -0.13 -0.14	1.04 1.01 0.99 1.00 1.03 0.98 1.00	Off	7
76.0	22.00 22.00	86 82	·1.1	-7.6 -7.3	312 312	-1	54.36 7.02	1	1.11 1.10	1.12	1.01 1.01	1.15 1.14	-0.14 -0.15 -0.14	1.00 1.03	Off Off	7
77.0	22.00	78	-1.1	-7.6	311	0	7.02 10.53 12.96 8.73 4.95	.1 .1 0 1	1.09	1.12	1.01	1.14	-0.14 -0.14 -0.15 -0.18 -0.20 -0.21 -0.18 -0.18	1.00 0.99 1.00 1.00 1.00 1.03	Off	7
78.0	22.00 27.00	77	:1:1	.7.0 .7.5	311 311	-1	9.99 10.26 3.96 0.54	2 1 0	1.08 1.07	1:12	1.01 1.01	1.13	-0.18 -0.20 -0.22	0.97 1.01 1.01 1.01	Off	7
79.0	27.00	74	-1.1	-12.1	312	-1	0:54 1.71 0:18	0 0	1.07	1.11	1.01	1.13	-0.20 -0.22 -0.23 -0.23 -0.21 -0.19 -0.20	1.03 1.01 1.00 1.00		7
80.0	22.00 22.00	68	:1:1	-12.6 -12.7	312 312	:1 :1	-0.90 -2.25 -0.27 2.16	·1 0 1 ·1	1.07 1.07	1:11	1.01 1.01	1.13	-0.18 -0.17 -0.15 -0.14 -0.12	0.99 0.98 1.03 1.03 0.99 1.03		7,
81.0	27.00	70 66	-1.1	-11.8	312	-1	3.69 3.78	·1 ·3	1.07	1.11	1.01	1.13 1.13	-0.16 -0.19 -0.23	1.03 1.01 0.98	i Offi	7
82.0	27.00 27.00	61	:1:1	-11.9 -10.4	311 311	·1 ·1	3.42 3.06 2.88 6.48	0 -2 -1 2	1.04 1.02	1.09 1.07	1.01	1.11	0.18 -0.17 -0.15 -0.14 -0.12 -0.19 -0.23 -0.29 -0.29 -0.29 -0.29 -0.29 -0.20 -0.19	1.06 1.00 0.97 1.04 1.00 1.02	off	7,
83.0	22.00	62 60	-1.1	.6.9	311	-1	7.74 5.49	·2 ·2	1.01	1.05	1.01 1.01	1.09 1.10	-0.16 -0.19 -0.20	1.01 1.00 1.00	Off Off	
84.0	27.00 27.00	57	·1.1 ·1.1	-4.5 -3.2	311 311	·1 ·1	3.78 3.24 0.36 -0.54	.2 .2 .2	1.01	1.04	1.01	1.09	-0.19 -0.20 -0.21 -0.22 -0.23 -0.25 -0.26 -0.27	1.02 0.99 1.00 1.03 1.00 0.99	Off	7
85.0	27.00	54 52	-1.1	-3.9	311	-1	-0.72 -0.45	·1 ·2	1.00 1.01	1.03 1.03	1.01	1.09	-0.27 -0.27 -0.27	1.03	Off Off	7
86.0	27.00 27.00	49	·1.1 ·1.1	-4.6 -4.6	311 311	-1 -1	0.18 0.63 1.17 1.17	-5 -6	1.01	1.02	1.01	1.09	-0.27 -0.27 -0.30 -0.32 -0.33 -0.29 -0.27	1.02 1.04 1.01 1.00 1.02 0.99	orr	7
87.0	27.00	46 44	-1.1	-4.5	311	-1	1.17 1.26	. 7 - 8	1.01 1.01	1.02 1.02	1.01 1.01	1.07 1.06	-0.27 -0.26 -0.25	1.02 1.00 0.98 1.03 1.00	Off Off	7
88.0	27.00 27.00	43	:1.1 :1.1	-4.3 -4.3	311 311	.1 1	1.08 1.08 1.35	-8 -8 -6 -5	1.01	1.02	1.01	1.05	0.27 -0.26 -0.25 -0.26 -0.26 -0.26 -0.25	1.00 1.01 1.00	orr	7
89.0	22.00	43 43	-1.1	-3.6	311	-1	1.62 2.07 2.25		1.01 1.00	1.01 1.01	1.01 1.01	1.05	0.24 0.23 0.23 0.22 0.21 0.21	1.00 1.00 1.02 1.01 1.00	Off Off	7
90.0	22.00 22.00	43	-1.1 -1.1	·2.8 ·2.3	310 310	:1	2.43 2.52 2.70	·6 ·7 ·10	1.00	1.01	1.01	1.04	-0.18	1.01	0ff	77
91.0	22.00	43 43	-1.1	-2.0	309	-1	2.70 2.43 2.25	·10 ·11 ·11	1.01 1.01	1. 0 1 1. 0 1	1.01 1.01	1.04 1.04	-0.18 -0.17 -0.16 -0.16 -0.16 -0.17 -0.17	1.00 1.02 1.01 1.00 1.00 1.01 1.00	orr orr	7
92.0	27.00 27.00	43	:1:1	·1.8 ·1.7	309 308	:1	1.89 1.80	-12 -14 -14	1.01	1.01	1.01	1.03	-0.17 -0.17 -0.17	1.01	Off	7,
93.0	27.00	42 42	-0.7	-1.6	306	-1	2.07 2.70 3.60 3.96	-14 -17 -18	1.01 1.01	1.01 1.01	1.01 ,1.01	1.03 1.03	0.17 -0.17 -0.17 -0.16 -0.14 -0.12 -0.10 -0.06 -0.05 -0.04 -0.03 -0.02 -0.02 -0.02	1.00 1.01 1.01 1.00 1.00 0.99	Off Off	7
94.0	32.00 37.00	42	:1:1	·1.3 ·1.2	304 302	:1	4.41 4.50	- 19 - 20	1.01	1.01	1.01	1.03	-0.05 -0.04 -0.03	1.01 1.02 1.00	Off	7
95.0	37.00	42 42	-1.1	-0.9	302	-1	4,50 4,50 4,41 4,41	-19 -23 -27 -28	1.01 1.01	1.01 1.01	1.01 1.01	1.03 1.03	-0.02 -0.02 -0.02 -0.01 -0.02	1.01 1.01 1.01 1.01 1.01	Off Off	7
96.0	32.00 27.00	42	-1.1 -1.1	·0.9 ·0.7	297 293	:1	4.50 4.32 4.32	· 28 · 29 · 28	1.01	1.01	1.01	1.03	-0.02 -0.03 -0.04 -0.05 -0.05 -0.04 -0.02	1.01 1.02 1.02 1.00 1.01 1.01	Off	7
97.0	27.00	42 42	-1.1	-0.7	290	-1	4.32 4.05	· 28 · 28	1.00 1.01	1.01 1.01	1.01 1.01	1.03 1.03	-0.04 -0.02 -0.02	1.01	Off Off	7
98.0	22.00 22.00	42	:1.1 :1.1	·0.6 ·0.7	286 283	·1 ·1	3.78 3.06 2.52 2.07	·28 ·27 ·27 ·26	1.01	1.01	1.01	1.03	-0.02 -0.01 -0.02 -0.02 -0.02 -0.02 -0.02	1.00 1.01 1.01 1.01 1.01 1.01	off	7
99.0	22.00	42	-1.1	.0.9	279	1	1.89	. 19	1.01	1,01	1.01	1.03	-0.02 -0.02	1.01 1.01	. Off	

FDR Lapse Time	MSL ATE.	IAS (KMOTE)	Pitch Angle	Right	Mag. Heading	Roll Angle (degrees)	Rudder Position (upper) (degrees)	Angle of Attack (degrees)		EPR Engine 2 (ratio)	EPR Engine 3 (ratio)	EPR Engine 4 (ratio)	Long. Accel	Vert. Accel.	VHF	Pitch Trim Stab Pos (degrees)
(sec.)	(PEE1)	(KNOTS)	1	(dégrees)	(ueyrees)	(ucyr ees)	1.71 1.53	-14 -16	1.01	1.01	1.01	1.03			Off	7
100.0	22.00 22.00	42	-0.7 -0.7	-0.9	275 271	. <u>1</u>		·14 ·13	1.00	1.01	1.01	1.03	-0.02 -0.02 -0.02 -0.02 -0.02 -0.02 -0.02	1.02 1.02 1.00 1.01 1.02 1.01	Off	7
101.0	22.00	42 42	-6.7	-0.7 -0.4	267	1		-8 -8 -7	1.00 1.00	1.01 1.01	1.01 1.01	1.03 1.03	-0.02 -0.02 -0.02	1.01 1.01 1.03 1.01	Off Off	7
					2004						1.01	1.03	-0.02 -0.02 -0.02 -0.02 -0.02 -0.02	1.01 0.99 1.00 1.01	Off	7
102.0	22.00 22.00	42	:0.7 :0.7	-0.7	264 261	:1	·2.16 ·2.52 ·2.97	.6 .6 .5	1.01	1.01	1.01	1.03			011	
103.0	22.00	42 42	-0.7	-0.7 -0.5	258	-1	·2.88 ·2.88 ·3.06	-5 -5	1.01 1.01	1.01 1.01	1.01 1.01	1.03 1.03	-0.02 -0.02 -0.02 -0.02 -0.02 -0.01 -0.01	1.02 1.01 1.01 1.02 1.00 0.99	Off Off	7
104.0	27.00 27.00	42	-0.7	-0.9	255 252	0	-2.70 -2.43	·3 ·4	1.01	1.01	1.01	1.03	-0.01 -0.01 -0.01	1.02 1.01 1.00	Off	7
105.0	27.00	42 42	.0.7 -0.7	-0.5 -0.6	250	0	-1.98 -1.71 -1.35 -1.35	.4 .5 .5	1.01 1.01	1.01 1.01	1.01 1.01	1.03 1.03	-0.01 -0.01 -0.01 -0.00 0.00 0.00	1.01 1.01 1.00 1.00	Off Key	7
106.0	22.00 27.00	42	-0.7	-0.5	247	0		·5	1.01	1.01	1.01	1.03	0.00 0.00 0.01 0.01	1.02 1.01 1.00 0.99 1.01	Key	7
107.0	27.00	42 42	:0.7 :0.7	-0.5 -0.5	245 242	- <u>1</u>	-1.26 -1.26 -1.17 -1.17 -0.90	5.5 5.5 5.5	1.00 1.00	1.01 1.01	1.01 1.01	1.03 1.03	0.01 0.00 0.00 0.00	1.01 1.02 1.02 1.01 1.00 1.00	Off Off	7
108.0	27.00	42	-0.7	-0.4	240	0	-0.81 -0.99	-5 -5 -4	1.01	1.01	1.01	1.03	0.00	1.00 1.01 1.01 1.01	Off	7
109.0	22.00 22.00	42 50	:0.7 -0.7	-0.4 -0.5	238 236	.1	-0.99 -0.99 -1.17 -1.17 -1.08	.4 .5 .5	1.00 1.00	1.01 1.01	1.01 1.01	1.03 1.03	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	1.01 1.01 1.00 1.02 1.01 1.01 1.02	Off Off	7
110.0	22.00	42	-0.7	-0.4	234	-1	-0.63	.5 .5	1.00	1.01	1.01	1.03	0.00 0.00 0.00	1.01 1.02 1.01	Off	7
111.0	27.00 27.00	42 42	-0.7 -0.7	-0.6 -0.5	233 231	: <u>1</u> :1	0.18 0.09 0.18 0.18 0.09	.4 .3 .3	1.00 1.00	1.01 1.01	1.01 1.01	1.03 1.03	0.00 0.00 0.00	1.01 1.02 1.02 1.00 1.01 1.02	Off Off	7
112.0	27.00	42	l	-0.5	229	-1	0.09 0.00 0.09	-3 -2 -1	1.00	1.01	1.01	1.03	0.00 0.00 0.00 0.00	1.02 1.01 1.00 1.00 1.01	Off	7
113.0	27.00 27.00	42 42	.0.7 .0.7	-0.4 -0.4	228 227	1	0.09 0.00	00	1.00 1.01	1.01 1.01	1.01 1.01	1.03 1.03	0.00 0.00 0.00 0.00 0.00 0.00	1.00 1.01 1.01 1.01	0ff 0ff	777
114.0	22.00	52	-0.7	-0.5	226	-1	0.00 -0.45 -0.90 -1.08	0 1 0 0	1.01	1.01	1.01	1.03	0.00 0.00 0.00 0.00 0.00	1.00 1.01 1.01 1.01 1.01 1.00	off	7
115.0	22.00 22.00	42 42	-0.7 -0.7	-0.4 -0.4	225 225	·1	·1.17 ·1.08	0 1	1.01 1.01	1.01 1.01	1.01 1.01	1.03 1.03	0.01	1.01 1.01 1.00 1.01	Off Off	7
116.0	22.00	42	-0.4	-0.7	224	-1	-1.08 -0.81 -0.54 0.00 0.36	1 2 2 2 2	1.01	1.01	1.01	1.03	0.01 0.00 -0.01 0.00 0.01 0.01 0.00 0.00	1.01 1.00 1.01 1.01 1.01	Off	7
117.0	22.00	42	0.7	-0.4	224	0	0.54 0.72	2 2	1.00	1.01	1.01	1.03	0.00 0.01 0.01	1.01 1.01	077	7
118.0	22.00	83	-0.7	0.0	136	0	1	-81 -81	1.01	1.00		1.01	0.00 0.00 0.00	0.96 0.96 0.96	Off	6
119.0	22.00 22.00	83 80	.0.7 .0.7	0.0 -0.1	136 136	8	0.27 0.27 0.27	-81 -81	1.01 1.01	1:01 1:01	1.01	1.01 1.01	0.00	0.96 0.96	off off	6
120.0	22.00	83	-0.7	0.0	136	0	0.27 0.27 0.27 0.27	-80 -80 -76 -80	1.01	1.00	1.01	1.01	0.00 0.00 0.00 0.00	1.01 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96	Off	6
121.0	22.00 22.00	83 83	-0.7 -0.7	0.0 0.0	136 136	·1 0	0.27 0.27 0.27	-80 -80	1.01 1.01	1.00 1.00		1.01 1.01	0.00 0.00 0.00	0.96 0.96 0.97	Кеу	6
122.0	22.00	83	-0.7	0.0	136	-1	0.27 0.27 0.27 0.27	-81 -80 -81 -80	1.01	1.00	1.01	1.01	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.96 0.97 0.96 0.97 0.96 0.97	Key Key	6
123.0	22.00 22.00	83	.0.7 .0.7	0.0 0.0	136 136	.1	0.27 0.27 0.27	-81 -80 -81	1.01 1.01	1.00	1.01 1.01	1.01	0.00 0.00 0.00	0.97 0.97 0.96 0.97	Key	6
124.0	22.00	83 42	-0.7	0.0	136	0	0.27	-81 -81 -81	Į.	1.00	1.01	1.01 1.01	0.00 0.00 0.00 0.00	0.97 0.96 0.96 0.96 0.96		6

FDR Lapse	HSL ATT.	IAS	Pitch Angle	Elevator Position	Hag. Heading	Roll Angle	Rudder Position	Angle of Attack	EPR Engine 1	EPR Engine 2	EPR Engine 3	EPR Engine 4	Long. Accel	Vert. Accel.	VHF	Pitch Irim Stab
Time	(FEET)	(KNOTS)	(degrees)	Right		(degrees)	(upper)	(degrees)	(ratio)	(ratio)	(ratio)	(ratio)	(g)	(g)		Pos (degrees)
125.0	22.00 22.00	83	-0.7 -0.7	0.0 0.0	136 136	0	0.27 0.27 0.27 0.27 0.27	- 76 - 81 - 81 - 80	1.01 1.01	1.00 1.00	1.01	1.01	0.00 0.00 0.00 0.00	0.97 0.97 0.96 0.96 0.97 0.96 0.96	Key	6 6
126.0	22.00	42 83	-0.7	0.0	136	0		- 80 - 80	1.01	1.01	1.01 1.01	1.01 1.01	0.00 0.00 0.00	0.96 0.96 0.96	Key Off	6
127.0	22.00 22.00	84	.0.7 .0.7	0.0 0.0	136 136	-1 0	0.27 0.27 0.27 0.27 0.27	- 80 - 80 - 80 - 81	1.01	1.00	1.01	1.01	0.00 0.00 0.00 0.00 0.00	0.97 0.97 0.96 0.96 0.96 0.96	off	6
128.0	22,00	83 83	-0.7	0.0	136	0		-80 -80	1.01 1.01	1.00	1.01 1.01	1.01 1.01	0.00 0.00 0.00	0.97 0.96 0.97 0.97	Off Off	6
129.0	22.00 22.00	80	-0.7 -0.7	0.0 0.0	136 136	0	ļ	-81 -81 -75	1.01	1.00	1.01	1.01	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.97 0.97 0.96 0.96 0.96 0.96	Off	6
130.0	22.00	83 83	-0.7	0.0	136	0	0.27 0.27	-81 -80 -81	1.02	1.01	1.01	1.01 1.01	0.00 0.00 0.00	0.96 0.97 0.97 0.97	Off Off	6
131.0	22.00 22.00	83	-0.7 -0.7	0.0 0.0	136 136	0		-81 -81 -80	1.01	1.01	1.01	1.01	0.00 0.00 0.00 0.00 0.00	0.97 0.97 0.97 0.96	Off	6
132.0	22.00	83 83	-0.7	0.0	136	-1	0.27 0.27 0.27	-80 -81 -80	1.01 1.01	1.01 1.01	1.01 1.01	1.01 1.01	0.00 0.00 0.00	0.97 0.96 0.96 0.96 0.96 0.97	Off Off	6
133.0	22.00 22.00	83	-0.7 -0.7	0.0 0.0	136 136	0	1	-80 -81 -80 -81	1.02	1.01	1.01	1.01	0.00 0.00 0.00 0.00 0.00 0.00	0.96 0.97 0.96 0.96	Off	6
134.0	22.00	42 83	-0.7	0.0	136	-1	0.27 0.27 0.27	-81 -75 -80	1.01 1.01	1.00 1.01	1.01 1.01	1.01 1.01	0.00 0.00 0.00 0.00 0.00 0.00	0.96 0.96 0.96 0.96 0.96	Off Off	6
135.0	22.00 22.00	83	-0.7 -0.7	0.0	136 136	0		-81	1,01	1.00	1.01	1.01	0.00 0.00	0.96	Off	- 6
136.0	22.00	83 83	.0.7	0.0	136	0	0.27	-81 -80 -80 -81 -81	1.01 1.02	1.01 1.00	1.01 1.01	1.01 1.01	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.96 0.96 0.96 0.97 0.96 0.97	Off Off	6
137.0	22.00 22.00	83	-0.7 -0.7	0.0	136 136	0	0.27 0.27	-80 -81	1.02	1.00	1.01	1.01	0.00 0.00 0.00	0.96 0.96 0.96	Off	6
138.0	22.00	83 83	-0.7	0.0	136	0	0.27	-80 -80 -80 -77	1.02 1.02	1.00 1.01	1.01 1.01	1.01 1.01	0.00 0.00 0.00 0.00	0.96 0.97 0.96 0.96 0.96 0.96	Off Off	6
139.0	22.00 22.00	84	-0.7 -0.7	0.0	136 136	0	0.18 0.18 0.27	-80 -76 -81	1.01	1.00	1.01	1.01	0.00 0.00 0.00	0.96 0.97 0.97	Off	6
140.0	22.00	83 83	-0.7	0.0	136	0	1	-80	1.02 1.02	1.01 1.00	1.01 1.01	1.01 1.01	0.00 0.00 0.00 0.00	0.96 0.97 0.97 0.96 0.96 0.96		6
141.0	22.00 22.00	83	·0.7 ·0.7	0.0 0.0	136 136	0	0.27 0.27 0.18		1.01	1.01	1.01	1.01	0.00 0.00 0.00 0.00	0.96 0.97 0.96 0.97 0.96 0.97	Off	6
142.0	22.00	83 83	-0.7	0.0	136	0	0.09	-80 -80	1.01 1.01	1.00 1.00	1.01 1.01	1.01 1.01	0.00 0.00 0.00	0.97 0.97 0.96	Off Off	6
143.0	22.00 22.00	83	-0.7 -0.7	0.0	136 136	0	0.18 0.18 0.18 0.18	-81 -81 -81	1.01	1.01	1.01	1.01	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.97 0.97 0.96 0.96 0.96 0.97 0.96	Off	6
144.0	22.00	82 83	-0.7	0.0	136	0	0.18	.76	1.02	1.00	1.01 1.01	1.01 1.01	0.00 0.00 0.00	0.97 0.96 0.97		6
145.0	22.00 22.00	83	-0.7 -0.7	0.0	136 136	0 -1	0.18 0.18 0.18 0.18 0.18 0.18	-81 -81	1.02	1.01	1.01	1.01	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.97 0.96 0.96 0.96 0.96 0.96	Off	6
146.0	22.00	83 83	-0.7	0.0	136	0	l	· 80 · 81	1.02 1.03	1.00 1.00	1.01 1.01	1.01 1.01	0.00 0.00 0.00	0.96 0.96 0.97 0.96 0.97	Off Off	6
147.0	22.00 22.00	83	-0.7	0.0	136 136	0			1.03	1.00	1.01	1.01	0.00 0.00 0.00 0.00	0.96 0.96 0.96 0.96 0.97	orr	6
148.0	22.00	82 83	-0.7 -0.7	0.0	136	0		· 78 · 81	1.03	1.01	1.01 1.01	1.01 1.02	0.00	0.96 0.96 0.97	Off Off	6
149.0	22.00 22.00	83	-0.7	0.0	136	-1		ł	1.04	1.01	1.01	1.02	0.00 0.00 0.00 0.00 0.00 0.00	0.96 0.96 0.97 0.96 0.96 0.96 0.96	off	6

TWA Fit. 800, B747-131, Landing At JFK TABJFK1, Created: January 31, 1997, National Transportatin Safety Board

FDR Lapse Time	MSL ATT.	IAS	Pitch Angle	Elevator Position Right	Mag. Heading	Roll Angle	Rudder Position (upper)	Angle of Attack	EPR Engine 1	EPR Engine 2	1 -	EPR Engine 4	Long. Accel	Vert. Accel.	VHF	Pitch Trim Stab Pos
(sec.)	(FEET)	(KNOTS)	(degrees)	(degrees)	(degrees)	(degrees)		(degrees)	(ratio)	(ratio)	(ratio)	(ratio)	(g)	(g)		(degrees)
150.0	22.00	83 83	·0.7 ·0.7	0.0 -0.2	136 136	.0 -1	0.18 0.18 0.18 0.18	-81 -81 -80	1. 05 1. 05	1.02 1.02	1.01 1.01	1.03 1.03	0.00 0.00 0.00 0.00 0.00	0.97 0.96 0.97 0.96 0.96 0.97	Off Off	6
151.0	22.00	_ 83	-0.7	0.0	136	. 0	0.18	-81 -80	1.05	1.02	1.01	1.03	0.00	0.96 0.96	Off	6
152.0	22.00 22.00	83 83	:0.7 :0.7	0.0 0.0	136 136	8	0.18 0.18 0.18 0.18 0.27	-81 -81 -81 -75	1.05 1.05	1.03 1.03	1:01	1.03 1.03	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.959.758.668.979.797.888.858.668.979.7888.859.797.8888.797.797.8888.797.8888.797.8888.7988.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.798888.79888.79888.79888.79888.79888.79888.798888.79888.79888.798888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.798888.79888.79888.79888.798888.79888.79888.79888.798888.79888.798888.79888.79888.79888.79888.79888.79888.79888.79888.79888.798888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.798888.79888.79888.79888.798888.79888.79888.798888.79888.79888.798888.79888.79888.79888.79888.79888.79888.79888.79888.79888.798888.79888.79888.79888.79888.79888.79888.79888.79888.798888.79888.798888.79888.79888.79888.79888.79888.798888.79888.798888.79888.798888.79888.79888.79888.79888.79888.79888.79888.79888.79888.798888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.798888.79888.79888.79888.79888.79888.79888.798888.79888.798888.798888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.798888.79888.798888.79888.79888.79888.798888.79888.79888.79888.79888.79888.79888.79888.798888.79888.798888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.798888.79888.79888.79888.79888.798888.79888.79888.79888.79888.798888.79888.79888.79888.79888.79888.79888.798888.79888.79888.798888.79888.79888.79888.79888.79888.79888.79888.79888.79888.79888.798888.79888.79888.79888.798888.79888.79888.798888.79888.79888.798888.79888.79888.79888.79888.798888.79888.798888.79888.798888.7988888.798888.7988888.798888.798888.79888.79888.79888.79888.79888.798888.79888.79888.79888.79888.79888.79888.79888.79888.798888.798888.79888.79888.79888.79888.79888.79888.79888.79888.798888.79888888.7988888.798888.798888.79888.79888.798888.79888.79888.79888.798888.79888.79888.79888.79888.79888.79888.798888.79888.79888.798888.79888.79888.79888.79888.79888.79888.798888.79888.79888.798888888.798888.798888.798888.798888.7988878888.798888.798888.7988888888	Off Off	6
153.0	22.00	84	-0.7	0.0	136	0	0.18 0.18	-81 -76	1.05	1.03	1.01	1.04	0.01 0.01 0.01	0.96 0.96	Off	6
154.0	22.00 22.00	83 83	-0.7 -0.7	0.0 0.0	136 136	0	0.18			1.03 1.03	1.01 1.01	1.04 1.04	0.01 0.01 0.01 0.01 0.01	0.97 0.96 0.96 0.96 0.97 0.96	Off Off	6
155.0	22.00	83	-0.7	0.0	136	0	0.18 0.18	-80 -81	1.05	1.03	1.01	1.04	0.02 0.02 0.02	0.96 0.97 0.96	Off	6
156.0	22.00 22.00	83 83	-0.7 -0.7	0.0 0.0	136 136	0	0.18 0.18 0.18	-81 -81 -81	1.04 1.04	1.03 1.03	1.01 1.01	1.04 1.04	0.02 0.02 0.02 0.02 0.03	0.96 0.96 0.97 0.96 0.96	Off Off	6
157.0	22.00	83	-0.7	0.0	136	-1	0.18 0.18 0.18	-81 -81 -81	1.04	1.03	1.01	1.04	0.02 0.02 0.02 0.02 0.02	0.97 0.96 0.97 0.97 0.96 0.96 0.96	Off	6
158.0	22.00 22.00	83 83	-0.7 -0.7	0.0 0.0	136 136	0	0.18 0.18	·81 -81	1.04 1.04	1.03 1.03	1.01 1.01	1.04 1.04		I 0.961	Off Off	6
159.0	22.00	83	-0.7	0.0	136	-1	0.18 0.18 0.18 0.18	-81 -80	1.04	1.03	1.01	1.05	0.02 0.02 0.02 0.03 0.03 0.03 0.02 0.02	0.97 0.96 0.96 0.96 0.97 0.97	off	6
160.0	22.00 22.00	83 83	-0.7 -0.7	0.0	136 136	·1 ·1	0.18	-81 -81	1.04 1.04	1.03	1.01 1.01	1.05 1.05	0.02 0.02 0.02	0.96 0.96	Off Off	6
161.0	22.00	83	-0.7	0.0	136	-1	0.18 0.18 0.27 0.18 0.18	-81 -81 -81 -81 -80	1.04	1.03	1.01	1.05	0.02 0.02 0.02 0.02 0.02	0.96 0.96 0.97 0.97 0.96 0.96 0.96	Off	6
162.0	22.00 22.00	83 83	.0.7 .0.7	0.0 0.0	136 136	:1	0.27 0.18 0.18 0.18	-80 -81 -78 -81	1.04 1.04	1.03 1.03	1.01 1.01	1.05 1.05	0.02 0.02 0.02 0.02	0.96 0.97 0.96	Off Off	6
163.0	22.00	83	-0.7	0.0	136	-1	0.18 0.18	ľ	1.04	1.03	1.01	1.05	0.02 0.02 0.02 0.02	0.96 0.97 0.96 0.96 0.97 0.96 0.97	off	6
164.0	22.00 22.00	83 83	·0.7 ·0.7	0.0 0.0	136 137	·1 0	0.18 0.18 0.18 0.18	-80 -81 -80 -80	1.04 1.04	1.03 1.03	1.01 1.01	1.05 1.05	0.02 0.02 0.02 0.02	0.96 0.96 0.97 0.96 0.97 0.97 0.96	off	6
165.0	22.00	83	-0.7	0.0	137	-1		- 80 - 80	1.04	1.03	1.01	1.04	0.02 0.02 0.02	0.97 0.96 0.96	Off Off	. 6
166.0	22.00 22.00	B 3	.0.7 .0.7	0.0 0.0	137 137	0		[1.04 1.04	1.03 1.03	1.01 1.01	1.04			orr	6
167.0	22.00	83 42	.0.7	0.0	137	0		.79	1.04	1.03	1.01	1.04 1.04	0.02 0.02 0.02	0.96 0.97 0.96	Off Off	6
168.0	22.00 22.00	83	.0.7 .0.7	0.0 0.0	137 137	0		- 76 - 81 - 81	1.04 1.04	1.03 1.02	1.01		0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02	0.96 0.96 0.97 0.96 0.97 0.97 0.97	Off	6 6
169.0	22.00	83 83	-0.7	0.0	137	-1	0.18 0.36	-80 -81	1.04	1.02	1.01	1.07 1.03	0.02 0.01 0.01	0.97 0.97	Off Off	6
170.0	22.00 22.00	83	.0.7 .0.7	0.0 0.0	137 136	0			1.04	1.02		1.03	0.01 0.01 0.02 0.02 0.01	0.97 0.97 0.96 0.96 0.97 0.96	Off	6
171.0	22.00	83 83	-0.7	0.0	136	0		1		1.02 1.02	1.01 1.01	1.03 1.03	0.01 0.01 0.02 0.02	0 97	Off Off	6
172.0	17.00 22.00	74	-0.7 -0.7	0.0 0.0	136 136	0	0.27 0.18 0.09	· 78 · 81 · 76	1.03	1.02	1.01	1.03	0.01 0.01 0.01 0.01	0.96	off	6
173.0	22.00	83 80	-0.7	0.0	136	0	0.09	-81	1.03	1.02 1.02	1.01 1.01	1.03 1.03	0.01 0.01 0.01	0.97 0.96	Off Off	6
174.0	22.00 22.00	83	-0.7 -0.7	0.0 0.0	136 136	0	0.54 0.72		1	1.01	1.01	1.02	0.00 -0.02 -0.03 -0.05 -0.04	0.97 0.96 0.97	. Off	6 6

Lapse Time	(FEET)		Angle	Position Right	_	1		i	EPR Engine 1 (ratio)		1	EPR Engine 4 (ratio)	Long. Accel (g)	Vert. Accel. (g)		Pitch Trim Stab Pos (degrees)
							0.81	-80					·0.02 ·0.01	0.97 0.97 0.96		
175.0	22.00	83 83	-0.7	0.0	136	0	0.72 0.81 1.08	-81 -80 -81	1.03 1.03	1.01 1.01	1.01 1.01	1.02 1.02	0.01 0.00 0.00 0.00 0.00 0.00	0.97 0.96 0.97 0.97 0.96 0.97	Off Off	6
176.0	22.00	83	-0.7	0.0		. 0	1.89	-81		1.01	1.01	1.02	0.00	0.96	Off	6
177.0	22.00		-0.7	0.0	134	- 6	2.70 3.78	-81 -81					-0.01 -0.01 -0.01	0.971		6

TWA FIt. 800

B747-131, Landing at JFK TABJFK2, Date Printed: January 31, 1997

National Transportation Safety Board

TWA Flt. 800, B747-131, Landing at JFK TABJFK2, Date Printed: January 31, 1997, National Transportation Safety Board

FDR Tapse Time (seconds)		Left i	Rudder Position (lower)	Aileron Position R inbd	Flap pos Trailing Inbd	Flap pos Trailing OUTBD	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2	Leading Edge Lt. Set 3	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1	Leading Edge Rt. Set 2	Leading Edge Rt. Set 3	Leading Edge Rt. Set 4 (discrete)	Reverser Eng 1	Reverser Eng 2	Reverser Eng 3	Reverser Eng 4
(0000	(FEET)	(degrees)	(degrees)	(degrees)	(degrees)	(degrees)	(discrete)	(discrete)	(discrete)	(discrete)	(discrete)	(discrete)	(discrete)	(discrete)	(1-T/R)	(1-T/R)	(1-T/R)	(1-T/R)
0.0	540.0	1.6	-0.4	0.6	25.4	24.1	Ext	Ext	Ext	Ext		Ext	Ext	Ext	STOW	STOW	STOW	STOW
0.7	540.0	1.2	-0.2	0.0	25.4 25.5 25.4 25.5 25.5	24.1 24.0 24.0 24.1 24.1 24.1 24.2	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
1.3	540.0	0.8	-0.2	1.0	25.5	24.1	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STON	STOW
2.0	540.0	0.8	-0.2	0.6	25.4 25.4 25.5			Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
2.7	540.0	0.9	0.0	3.9	25.4 25.5	24.0 24.1	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
3.4	540.0	1.1	-0.1	-2.0	25.5 25.5	24.1 24.0	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STON
4.0	540.0	3.2	0.0	0.0	25.4 25.5 25.5 25.5 25.4 25.4 25.4	24.1 24.1 24.1 24.1 24.1 24.1 24.1 24.1	Ext	Ext	Ext	Ext	Ext		Ext	Ext			STOW	STON
4.7	540.0	3.1	0.2	1.0	25.4 25.4	24.1 24.1	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STON
5.4	540.0	3.2	0.0	-3.0	25.5 25.5 25.4 25.5 25.5 25.4 25.5	24.0 24.1 24.1 24.1 24.1 24.1 24.1	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STON
6.0	540.0	1.9	0.1	-2.6	25.4 25.5	24.1 24.1	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext		STOW	STOW	STON
6.7	540.0	1.4	0.4	-2.0	25.5 25.4	24.1 24.1	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext			STOW	STON
7.4	540.0	2.0	0.4	1.6			.1	Ext	Ext	L	Ext		Ext	Ext		STOW	STOW	STO
8.1	540.0	3.1	0.0		25.5 25.5 25.5 25.5 25.4 25.5 25.5	24.1	Ext	Ext	Ext		Ext	i	Ext	Ext		STOW	STOW	STOR
8.7	540.0	3.5	0.0		25.5 25.5	24.1 24.1 24.1 24.1 24.1 24.1	Ext	Ext	Ext		Ext		Ext	Ext	1	i	STOW	STON
9.4	405.0	3.6	0.1	-3.0	25.4 25.5	24.1 24.1	Ext	Ext	Ext		Ext		Ext	Ext		1	STOW	STON
10.1	405.0	3.4	0.2	-2.4			Ext	Ext	Ext	Ext	Ext		Ext	Ext	1	STOW	STOW	STON
10.8	405.0	3.1	0.2	-2.0	25.5 25.5 25.5 25.5 25.5 25.5 25.5	24.1 24.1 24.1 24.2 24.2 24.2 24.1 24.0	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOR
11.4	405.0	2.8	0.3	3.2	25.5 25.5	24.1 24.2	Ext	Ext	Ext	Ext	Ext		Ext	Ext	STOW	1	STOW	STO
12.1	405.0		0.1	}	25.5 25.5	24.2 24.1	Ext	Ext	Ext				Ext	Ext		1	STOW	STO
12.8	405.0	2.3	0.1	-2.0	۷۵.۵			Ext	Ext	Ext	Ext	Ext	Ext	Ext		STOW	STOW	STON
13.4	405.0	1.5	0.1	-2.0	25.4 25.3	24.1 24.1	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	1	STOW	STOW	STO
14.1	405.0	1.7	0.4	-2.0	25.5 25.3	24.1 24.1	Ext	Ext	Ext		Ext	ŀ	Ext	Ext			STOW	STON
14.8	405.0	2.1	0.2	ł	25.5 25.4	24.1 24.1	Ext	Ext	Ext		Ext	l .	Ext	Ext		i	STOW	STO
15.5	405.0	1.8	0.2		25.5 25.3 25.5 25.4 25.4 - 25.3	24.1 24.1 24.1 24.1 24.1 24.1 24.0 24.1	Ext	Ext	Ext				Ext				STOM	STO
16.1	405.0	1.7	0.0	ł	25.5 25.5 25.4	24.1 24.0 24.0 24.0	Ext	Ext		Ext	ļ			1	Į.		STOW	STO
16.8	405.0	2.5	0.0		1 23.3	24.0 24.0	Ext	Į.	i			1					STOW	Į.
17.5	270.0	3.0	-0.2	.2.6	25.5 25.4	24.1 24.1	EXT		1		1		ļ				STOW	
18.1	270.0	2.5	-0.1	-3.0	25.4	24.1	4	Ext	L	L	l			L			STOW	1
18.8	270.0	3.2	0.0		25.4 25.4 25.4 25.4 25.4	24.1 24.1	.1		}		1		i		1	1	STOW	
19.5	270.0	3.4	0.0	i	25.4 25.4	24.1 24.1	Ext	1						1	1		STOW	I
20.2	270.0	3.4	0.0				ıl.			[l .				Į.	STOW	1
20.8	270.0	2.7	0.0		25.5	24.1 24.1	Ext					l			1	1	STOW	1
21.5	270.0	1.5	0.0		25.5 25.5	24.1 24.1	Ext	[ľ	l .	i	ŀ				i .	STOW	1
22.2	270.0	1.2	0.0	1	25.3	24.1 24.1 24.1 24.1	Ext	1	1								WOTZ	I
22.8	270.0	1.2	1		25.4 25.3	24.0	Ext	1					1	1	1	1	STOW	[
23.5	270.0		0.0		25.5	24.1			1		l	1]				STOW	STO
24.2	270.0	1	0.0		25.5 25.5	24.1 24.1	Ext]		ł	Į.	i			STOW	STO
24.9	270.0	1	0.1		25.4 25.3	24.1 24.1	Ext	1	Ì	i	1				1	1	STOW	
25.5	270.0		l		25.5 25.4	24.0 24.1	Ext		ł	i .	1	ĺ	1	1	1		STOW	
26.2	270.0	3.2	0.5	5.9	25.5 25.4 25.3 25.3 25.4 25.5	24.0 24.1 24.1 24.1	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STON	WOTZ	STOW	STOW

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FDR lapse Time (seconds)	ALTC (FEET)	Left	Rudder Position (lower) (degrees)	Aileron Position R inbd (degrees)	Flap pos Trailing Inbd (degrees)	Flap pos Trailing OUTBO (degrees)	Leading Edge Lt. Set 1 (discrete)	Leading Edge Lt. Set 2 (discrete)	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4 (discrete)	Leading Edge Rt. Set 1 (discrete)	Leading Edge Rt. Set 2 (discrete)	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4 (discrete)	Reverser Eng 1	Reverser Eng 2 (1-T/R)	Reverser Eng 3 (1-T/R)	Reverser Eng 4 (1·T/R)
26.9	270.0	3,1	0.5	0.0	25.4	24.1	Ext	STON	STOW	STOW	STOW							
27.5	270.0	1.7	0.2	7.5	25.4 25.5 25.5	24.1 24.1 24.2	Ext	Ext	Ext	Ext	l	Ext	Ext	Ext	STON	STOW	STOW	STOW
28.2	270.0	0.7	0.0	4.5	25.5 25.5	24.1 24.1 24.1	Ext	STOW	STOW	STOW	STOW							
28.9	270.0	0.9	-0.4	86.0	25.5 25.5 25.5 25.5 25.4 25.4	24.1 24.1	Ext	Ext	1	Ext	Ext		Ext	Ext	STOW	STOW	STOW	STOW
29.6	270.0	1.2	-0.5	-2.6	1 25.5	1 24 1	Ext	STOW	STOW	STOW	STOW							
30.2	135.0	2.7	-0.2	-10.1	25.5 25.5	24.1 24.1	Ext	STOW	STOW	STOW	STOW							
30.9	135.0	3.3	-0.3	-2.6	25.5 25.5 25.5 25.4 25.4	24.1 24.1	Ext	STOW	STOW	STOW	STOW							
31.6	135.0	4.5	0.0	-5.3	25.4 25.4 25.5	1 Z4.1	Ext	STOW	STOW	STOW	STOW							
32.2	135.0	4.7	0.4	1.6		24.1 24.1	Ext	STOW	STOW	STOW	STOW							
32.9	135.0	1.5	1.3	2.6	25.5	24.1 24.1 24.1	Ext	STOW	STOW	STOW	STOW							
33.6	135.0	1.8	1.4	9.9	25.4	24.1 24.1 24.1	Ext	STOW	STOW	STOW	STOW							
34.3	135.0	1.4	0.8	2.6	25.5 25.5 25.4 25.5 25.4 25.4	24.1 24.1	Ext	STOW	STOW	STOW	STOW							
34.9	135.0	1.4	0.0	-3.0	25.5 25.5	24.1 24.1	Ext	Ext		Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
35.6	135.0	3.6	0.0	-3.0	25.4 25.5	24.1 24.1 24.1	Ext	STOW	STOW	STOW	STOW							
36.3	135.0	3.7	0.0	.5.7	25.5 25.5	24.1 24.1	i	Ext		Ext			l	Ext	STOW		STOW	STOW
37.0	135.0	2.7	0.2	4.9	25.5	24.1 24.1	Ext	Ext		Ext	Ext	l	Ext	Ext	STOW	STOW	STOW	STOW
37.6	135.0	2.0	0.4	16.0	25.4 25.5	24.0 24.1	Ext	Ext		Ext	Ext		Ext	Ext	STOW	STOW	STOW	STOW
38.3	135.0	2.7	0.3	-3.0	25.5 25.5	24.1 24.1	Ext	Ext		Ext	Ext	1	Ext	Ext	STOW		STOW	STOW
39.0	0.0	1.6		.7.3	25.5	24.1 24.1 24.1 24.1 24.1	Ext	Ext	1	Ext	Ext	1	Ext	Ext	STOW		STON	
39.6	0.0	1.2		-4.3	25.5	24.1	Ext	Ext Ext		Ext	Ext		Ext	Ext	STOW		STOW	STOW
40.3 41.0	0.0	2.6 3.1	ļ	·4.3 ·2.0	25.5	24.1 24.1 24.1	Ext Ext	Ext		Ext Ext	i	1	Ext	Ext	STON		STOW	STOW
41.7	0.0	1.1	1.1	9.9	25.4	24.1 24.1	Ext	Ext		Ext	Ext		Ext Ext	Ext Ext	STOW	STOW STOW	STOW STOW	STOW STOW
42.3	0.0	1.5		-1.6	(3.5	24.1 24.1	Ext	Ext		Ext	Ext	Ext	Ext	Ext	STOW		STOW	STOW
43.0	0.0	1.2	1	2.4	25.5	24.1	Ext	Ext		Ext	Ext		Ext	Ext	STOW	STOW	STOW	STOW
43.7	0.0	1.9		3.0	25.4 25.5 25.5 25.5	24.1 24.2	Ext	Ext		Ext	Ext	i	Ext	Ext	STOW	1	STOW	STOW
44.3	0.0	1.1	-0.2	8.7	25.5 25.4	24.1 24.1	Ext	Ext		Ext	Ext	i	Ext	Ext	STOW		STOW	
45.0	0.0	0.3		1	25.4 25.5 25.5 25.5 25.5 25.4 26.5 25.4 25.5 25.4	24.1 24.1 24.0 24.1	Ext	Ext			Ext		1	Ext	STOM		STOW	
45.7	0.0	0.3	0.0	-3.0	25.5 25.5	24.1 24.1 24.1	Ext	STOW	STOW	STON								
46.4	0.0	0.9	0.2	1.2	25.5 25.4	24.1 24.1	Ext	STOW	STOW	STOW	l							
47.0	0.0	0.9	0.5	-1.6	25.5 25.5	24.1 24.1	Ext	STOW	STOW	STOW	STOW							
47.7	0.0	0.1	0.0	-13.0	25.5 25.5	24.1 24.0	Ext	STOW	STOW	STOW	STOW							
48.4	0.0	-1.7	0.5	-8.3	25.5	24.1 24.0 24.0	Ext	STOW	STOW	STOW	STON							
49.0	0.0	-2.1	0.9	-3.7	25.4 25.5	24.0 24.1 24.0	£xt	Ext	STOW	STOW	STOW	STOW						
49.7	0.0	-3.1	1.9	-2.4	25.4 25.4	24.0	Ext	STOW	STOW	STOW	STOW							
50.4	0.0	-1.3	3.7	16.2	2 20	24.1 24.0 24.0	Ext	STOW	STOW	STOW	STOW							
51.1	0.0	-5.6	9.4	24.3	25.5 25.5 25.5 25.5 25.5 25.5 25.5 25.5	24.1 24.1	Ext	STOW	STOW	STOW	STOW							
51.7	0.0	.2.2	-1.4	12.0	25.5	24.1 24.1	Ext	STON	STOW	STOW	STON							
52.4	0.0	-4.0	-0.5	21.7	25.5 25.5	24.1 24.1	i Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	1	STOW	STOW
53.1	0.0	-6.5	0.0	6.9	25.5 25.5	24.1 24.1 24.1	Ext	STOW	STOW	STOW	STOW							

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FDR lapse	ALTC	Elevator Position	Rudder Position	Aileron Position	Flap pos Trailing	Flap pos Trailing	Leading Edge Lt.	Leading Edge Lt.	Leading Edge Lt. Set 3	Leading Edge Lt. Set 4	Leading Edge Rt. Set 1	Leading Edge Rt. Set 2	Leading Edge Rt. Set 3	Leading Edge Rt. Set 4	Reverser Eng 1	Reverser Eng 2	Reverser Eng 3	Reverser Eng 4
(seconds)	(FEET)	Left (degrees)	(lower) (degrees)	R inbd	Inbd (degrees)	OUTBD (degrees)	Set 1	ISet 2	Set 3 (discrete)	Set 4 (discrete)	Set 1 (discrete)	Set 2 (discrete)	Set 3 (discrete)	Set 4 (discrete)	1 -	(1-T/R)	(1-T/R)	(1-T/R)
53.8	0.0	-5.7	-0.1	17.6	25.5	24.0	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
54.4	0.0	-3.1	0.4	19.1	25.5 25.5 25.4 25.4 25.5 25.5	24.1 24.2 24.1 24.0 24.1 24.0	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
55.1	0.0	.6.9	0.4	16.2	25.5 25.5	24.0	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
55.8	0.0	-4.1	0.4	7.5	25.5 25.5 25.5	24.0 24.1	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
56.4	0.0	-4.0	0.2	0.0	25.5 25.4	24.2	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STON	STOW	STOW	STOW
57.1	0.0	-4.6	4.0	-2.0	25.4 25.4 25.5	24.2 24.2 24.1 24.1 24.3	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STON	STOW	STOW
57.8	0.0	-4.5	5.1	-2.0	25.5 25.4	24.3	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
58.5	0.0	-4.6	7.9	-4.7	25.4 25.5 25.4	1 24.1	1	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	TRANS	TRANS
59.1	0.0	0.3	8.1	-2.0	25.4	24.0	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	TRANS	TRAKS	TRAKS	TRAKS
59.8	0.0	2.1	2.4	18.7	25.5 25.4 25.5	24.0 24.1	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	TRANS	TRANS	TRANS	
60.5	0.0	-2.4	3.1	12.0	25.4 25.4	24.1	i Ext	Ext	Ext	Ext	Ext	Ext	i .	Ext		TRANS	TRANS	
61.1	0.0	-4.0	6.8	-3.0	25.5 25.5	24.1	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRANS	DEP.
61.8	0.0	-1.2	12.0	-1.0	25.5 25.4 25.4	24.1 24.1 24.1	Ext	Ext	Ext	Ext	Ext	i	Ext	Ext		DEP	TRAKS	DEP.
62.5	0.0	-4.0	4.0	17.6	25.4 25.4	24.1	Ext	Ext	1	Ext	Ext	}	Ext	Ext	ì .	DEP	TRAKS	1
63.2	0.0	.6.3	12.5		25.4 25.4 25.5 25.5	24.1 24.2 24.2 24.1	Ext	Ext	Ext	Ext	Ext	1	Ext		1	DEP	TRAKS	i
63.8	0.0	-6.6	12.5	L	25.5	24.1	1	Ext	1	Ext	Ext		Ext	Ext	L	DEP	TRANS	i
64.5	0.0	.2.4	7.0		25.5 25.5	24.3 24.2	Ext	Ext	Ext	Ext	Ext	l	Ext		•	DEP	TRAKS	
65.2	0.0	-9.2 -10.7	1.7 5.8	-3.0	25.5 25.5 25.5	24.2 24.1 24.3	Ext Ext	Ext Ext	Ext Ext	Ext Ext	Ext Ext		Ext Ext	Ext Ext		DEP	TRAKS	ı
65.8 66.5	0.0	-11.2	13.0	1	25.6 25.5 25.5	24.1	i .			İ	Ext					DEP	TRANS	ł
67.2	0.0	L	14.9	•2.0	25.5	24.3 24.2 24.2	Ext	Ext	1		Ext		l	Ext	i	DEP	TRANS	
67.9	0.0	.8.2	17.4	-16.0	25.5 25.5	24.2 24.3 24.2 24.1	Ext	1		Ext					ł	DEP	TRANS	
68.5	0.0	.7.1	14.9	-14.0	25.6 25.5	24.1 24.3 24.2	Ext			Ext		1		ļ.	1	1	TRANS	
69.2	0.0	-10.7	17.4	9.3		24.2 24.4	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRANS	DEP.
69.9	0.0	-11.3	16.4	-9.3			Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRAKS	DEP.
70.5	0.0	-11.2	17.0	-31.0	25.5 25.5 25.5	24.2 24.3	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRANS	DEP.
71.2	0.0	-11.9	26.0	-31.8	25.6 25.5 25.5	24.4 24.4 24.2	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRANS	DEP.
71.9	0.0	.7.8	26.0	-39.1	25.5 25.5 25.5	1 24.4	l Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRANS	DEP.
72.6	0.0	-6.7	25.5	-52.5	25.6 25.6	24.3	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRAKS	DEP.
73.2	0.0	-7.8	26.2	-55.0	25.5	24.2 24.3	ll Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRANS	DEP.
73.9	0.0	-4.6	20.4	-55.4	25.5 25.6 25.5 25.6 25.5 25.6	24.4 24.3 24.3	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRANS	DEP.
74.6	0.0	1.4	19.4	-49.7	25.5	24.3 24.3 24.3	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRANS	DEP.
75.2	0.0	5.8	0.2	-25.6	25.5 25.5 25.6 25.5 25.6 25.5 25.5 0.0	24.3 24.3	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRAKS	DEP.
75.9	0.0	8.6	4.2	-44.6	25.5 25.6	24.4 24.3	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRANS	DEP.
76.6	0.0	8.3	10.8	1	25.5 25.5	24.4 24.4	Ext		1			1	1			DEP	1	
77.3	0.0	8.3	1		25.5	24.3 24.3	Ext		<u> </u>				1			DEP	TRANS	1
77.9	0.0	8.3	10.2		25.5 25.6	24.4 24.4 24.4	Ext	1	1		1	1	1		1	DEP	TRAKS	
78.6	0.0	9.1	. 3.4	-27.6	25.5 25.6	24.4	Ext			1		1	1		1	1	1	
79.3	1	13.1	1	1	25.6	24. 24. 24.	Ext			1	i	1	1	ł		DEP		1
80.0	0.0	14.9	-2.1	.2.2	25.5	24.4	lį Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRANS	DEP.

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FDR Tapse Time (seconds)		Elevator Position Left	Rudder Position (lower)	Aileron Position R inbd	Flap pos Trailing Inbd	Flap pos Trailing OUTBD	Leading Edge Lt. Set 1	Leading Edge Lt. Set 2	Leading Edge Lt. Set 3 (discrete)	Leading Edge Lt. Set 4	Leading Edge Rt. Set 1	Leading Edge Rt. Set 2	Leading Edge Rt. Set 3 (discrete)	Leading Edge Rt. Set 4	Reverser Eng 1		Reverser Eng 3	Reverser Eng 4
	(FEET)	(degrees)	(degrees)	(degrees)	1 -	(degrees)	(discrete)	(discrete)	(discrete)	(discrete)	(discrete)	(discrete)	(discrete)	(discrete)	(1-T/R)	(1-T/R)	(1-T/R)	(1-T/R)
80.6	0.0	14.6	-0.3	-3.0	25.5 25.5 25.5 25.7 25.6 25.6 25.6	24.6 24.4 24.5 24.4	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRANS	DEP.
81.3	0.0	13.1	3.2	·10.3	25.5 25.7	24.5 24.4	Ext	Ext	Ext		Ext	Ext	Ext	Ext		DEP	TRAKS	DEP.
82.0	0.0	12.7	2.7	-10.1	25.6 25.6	24.5 24.5	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRANS	DEP.
82.6	0.0	11.1	2.4	-20.5	25.6 25.7	24.7 24.5	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRAKS	DEP.
83.3	0.0	7.6	7.5	-17.8	25.5 25.6 25.6 25.6 25.6 25.7 25.6	24.5 24.5 24.6	Ext	Ext	Ext	Ext	1	i	Ext	Ext	DÉP	DEP	TRAKS	DEP.
84.0	0.0	4.6	i	-5.1	25.6 25.6	24.6 24.5	Ext		Ext		1	Ext	Ext	Ext		D€P	TRAKS	DEP.
84.7	0.0	4.4	0.0	.2.6	25.6 25.7	24.5 24.6 24.5	Ext	Ext	Ext	Ext	l	Ext	Ext	Ext	i	DEP	TRAKS	DEP.
85.3	0.0	5.0	-1.3	-2.6	25.6 25.6	24.7 24.5	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRANS	DEP.
86.0	0.0	5.5	-0.1	-3.0	25.6	24.7 24.6 24.7	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	DEP	DEP	TRAKS	DEP.
86.7	0.0	5.6	0.5	-3.0	25.6 25.7	24.7 24.5	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext		DEP	TRANS	DEP.
87.3	0.0	5.8	0.7	-3.0	25.7 25.7	24.5 24.7 24.6	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	1	DEP	TRANS	DEP.
88.0	0.0	5.7	0.5	-3.0	j 25.9	1 54.8		Ext	Ext		Ext	Ext	Ext	Ext		DEP	TRANS	DEP.
88.7	0.0	5.4	0.7	-3.0	25.6	24.6 24.6	Ext	Ext	Ext	Ext	Ext	Ext		Ext	DEP	DEP	TRANS	DEP.
89.4	0.0	4.1	1.4	-2.6	25.7 25.7	24.7 24.5 24.6	Ext	Ext	Ext				Ext	Ext	1	DEP	TRANS	DEP.
90.0	0.0	3.6	1.7	-3.0	25.7 25.7	24.6 24.6	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	ļ	DEP	TRANS	DEP.
90.7	0.0	3.2	2.0	-3.0	25.7	24.6 24.6 24.6	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	l	DEP	TRAKS	DEP.
91.4	0.0	2.9	1.9	-2.6			Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	TRANS	TRANS	STOW	TRANS
92.0	0.0	2.8	1.5	-2.6	25.6	24.5	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	TRANS	TRANS	STOW	TRANS
92.7 93.4	0.0	2.8 2.6	1.6 3.1	-3.0 -2.6	25.7	24.6 24.6 24.6	Ext Ext	Ext Ext	Ext			Ext	Ext	Ext	TRANS	TRANS	STOW	TRANS
94.1	L				25.7	24.6			Ext	Ext	Ext	Ext	Ext	Ext		TRANS	STOM	TRANS
94.7	0.0	2.4	3.8 4.0	·3.0 ·2.6	25.7	24.6 24.6 24.6	Ext Ext	Ext Ext	Ext	Ext Ext		Ext	Ext	Ext	STOW	TRANS	STON	TRANS
95.4	0.0	1.8	4.1	-2.6	25.7	24.6 24.7	Ext	Ext	Ext Ext		Ext Ext	Ext Ext	Ext Ext	Ext	STOW STOW	TRANS STON	STOW STOW	TRAKS
96.1	0.0	1.8	4.1	-3.0	25.7	24.6 24.6	1	Ext	Ext			Ext	1	Ext Ext		STOW	STON	STOW STOW
96.8	0.0	1.7	4.0	-2.6	25.7	1 24.6		Ext	Ext	Ext	Ext	Ext				L		
97.4	0.0	1.8	4.1	.2.6	25.7	24.6 24.6	Ext	Ext	Ext			Ext		Ext Ext	STOW	STOW	STOW	STOW STOW
98.1	0.0	1.8	3.6		25.7	24.6 24.6 24.7	Ext	Ext	Ext			Ext		Ext		STOW	STOW	STOW
98.8	0.0	1.5	3.0		25./	24.6 24.7	Ext	Ext	Ext	Ext		Ext	Ext	Ext	STOW	STOW	STOW	STOW
99.4	0.0	1.7	2.5		75 A	74.7	Ext	Ext	Ext	Ext	Ext	Ext		Ext	STOW	STOW	STOW	STOW
100.1	0.0	1.8			25.6	24.6 24.7	1	Ext	Ext			Ext		Ext	ŀ	STOW	STOW	STON
100.8	0.0	1.7	1.2	l	25.8	24.7 24.6 24.6	1 Ext	Ext	Ext			Ext		Ext		STOW	STOW	STOW
101.5	0.0	1.6		-2.6	25.8 25.8 25.8	24.6 24.7	Ext	Ext	Ext	Ext		Ext		Ext	STOW	STOW	STOW	STOW
102.1	0.0	1.5	-1.6		25.8 25.8	24.6	Ext	Ext	Ext	Ext		Ext		Ext	STOW	STOW	STOW	STOW
102.8	0.0	1.7	-2.5	-2.6	25 8	24.6 24.6	Ext	Ext	Ext	i		Ext		Ext		STOW	STOW	STOW
103.5	0.0	1.7	-3.1		25.8 25.8	24.7 24.7	Ext	Ext	Ext	Ext		Ext		Ext		STOW	STOW	STOW
104.1	0.0	1.7		.2.6	25.8 25.7	24.7 24.7	Ext	Ext	Ext	i	i	Ext	1	Ext	STOW	STOW	STOW	STOW
104.8	0.0	1.5	.2.5	2.6	1 43.8	31 24.0	1		Ext	L		Ext		Ext	STOW	STOW	STOW	5108
105.5	0.0	1.4	1	ì	25.8 25.8	24.7 24.6 24.7	Ext	1	Ext	1		Ext	1	Ext		STOW	STOW	STOW
106.2	\	1.7	.2.2	ļ	25./	24.7 3 24.7	1		Ext	Ext	1	Ext	Ext	Ext	STOW	STOM	STOW	STOW
106.8	l .		1		25.8 25.8	24.7 24.7 24.7	Ext		Ext			ĺ		Ext	STOW	STOW	STOW	STON
	1	L	ļ		25.9	24.6				1			1	,	J. J.	3,0	310	310

TWA Flt. 800, B747-131, Landing at JFK TABJFK2, Date Printed: January 31, 1997, National Transportation Safety Board

FDR lapse Time (seconds)	ALTC	Elevator Position Left	Position	Aileron Position R inbd	Flap pos Trailing Inbd	Flap pos Trailing OUTBD		Leading Edge Lt. Set 2	Leading Edge Lt. Set 3	Leading Edge Lt. Set 4	Leading Edge Rt. Set 1	Leading Edge Rt. Set 2	Leading Edge Rt. Set 3		Reverser Eng 1			Reverser Eng 4
(30001103)	(FEET)						(discrete)	(discrete)			(discrete)			(discrete)	(1-T/R)	(1-T/R)	(1-T/R)	(1-T/R)
107.5	0.0	1.4	-2.1	-2.6	25.8 25.9	24.7 24.6	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
108.2	0.0	1.4	-2.1	-2.6	25.2 25.3	23.7 24.0	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOM	STOW	STOW
108.8	0.0	1.5	-2.2	-3.0	24.3	22.4	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOM	STOW	STOW
109.5	0.0	1.3	-2.4	.2.6	24.5 22.9 23.3	21.3 21.1	l Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
110.2	0.0	1.5	-1.9	-2.6		19.7	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
110.9	0.0	1.4	-1.3	-3.0	20.2 20.6	18.1 17.7	. Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
111.5	0.0	1.4	-1.3	-2.6	l 18.6	16.5	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
112.2	0.0	1.4	-1.3	.2.6	18.8 17.2 17.5	15.1 15.1 14.7	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
112.9	0.0	1.5	-1.3	-2.6		13.7	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	2104	STON
113.5	0.0	1.4	-1.5	-2.6	14.5 14.9	12.5 12.4	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
114.2	0.0	1.4	-2.2	-2.6	13.2 13.7	11.2	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
114.9	0.0	1.4	-2.4	-3.0	12.1 12.4	10.1	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
115.6	0.0	1.4	-2.2	-2.6	11.0	9.2	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STON	STOW	210
116.2	0.0	1.4	-1.5	-2.6	11.2 10.2 10.3	9.3 8.3 8.3	Ext	Ext	Ext	Ext	Ext	Ext	Ext	Ext	STOW	STOW	STOW	STOW
116.9 117.6					10.3	8.3												